OORSAKE VAN PADONGELUKKE MET VERWYSING NA DIE R44

Tussen Somerset-Wes en Klapmuts

deur

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TESIS

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vereistes vir die graad van

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Promotor:
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VERKLARING

Ek, die ondergetekende, verklaar hiermee dat die werk in hierdie tesis vervat, my eie oorspronklike werk is en dat ek dit nie vantevore in die geheel of gedeeltelik by enige universiteit ter verkryging van 'n graad voorgelê het nie.

Sinopsis (Afrikaans)

Suid-Afrika en ander ontwikkelende lande ervaar groot probleme met verkeersongelukke. Ten spyte van veldtogte soos Arrive Alive wat geloods word, neem ongelukskoerse nie beduidend af nie, en daar word voorspel dat die situasie nie gaan verbeter nie. Hierdie studie is op 'n pad in die Wes-Kaap, die R44, gedoen om die oorsake van padongelukke vas te stel. Die oorsake van ongelukke is van die ongeluksvorms afgelei, en verwantskappe is gesoek met ander faktore. Die resultate van die studie is risikofaktore (menslike-, omgewings- en voertuigfaktore) vir die 14 ongelukstipes wat op die R44 voorgekom het, asook voorkomingsmaatreëls om padongelukke te voorkom. Daar is gevind dat die menslike faktor die grootste oorsaak van ongelukke is. Uit die 404 ongelukke wat geanaliseer is, is 77.7% van die ongelukke deur menslike faktore, 8.7% van die ongelukke deur onbekende faktore, 7.2% van die ongelukke deur omgewingsfaktore en 6.4% van die ongelukke deur voertuigfaktore veroorsaak. In hierdie studie is probleme ondervind met die datakwaliteit, en daaroor is verslag gedoen en aanbevelings gemaak.

Sinopsis (English)

South Africa, and other developing countries, experience great problems concerning road traffic accidents. Despite road safety campaigns like Arrive Alive being launched, accident rates do not decline significantly and the problem is predicted to get worse. This study is done on a road in the Western Cape, the R44, to investigate the causes of road accidents. The causes of the accidents are deduced from the accident reports and relationships are sought with other factors. The results of this study are risk factors (human-, environment- and vehicle factors) for the 14 accident types that occurred on the R44, as well as measures to prevent road accidents. It has been found that the human factor plays the biggest role in road accidents. Out of the 404 accidents analysed, 77.7% were caused by human factors, 8.7% by unknown factors, 7.2% by environmental factors and 6.4% by vehicle factors. The problems experienced with the data quality are reported and recommendations concerning it are made.

"Die Here het sy oë oral op die aarde sodat Hy dié kan help wat met hulle hele hart op Hom vertrou..."

2 Kronieke 16:9

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Stellenbosch Verkeersdepartement vir hulp en data verkryging.

Inhoudsopgawe

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1. Lys van Tabelle

Bladsy

2. Lys van Figure

Bladsy

3. Lys van simbole, vreemde woorde en spesiale terminologie

PAWC	Provinsiale Administrasie Wes-Kaap
AR	Accident Report (nuwe tipe ongeluksvorm)
OAR	Officer's Accident Report (ou tipe ongeluksvorm)
acc no	ongeluksnommer
Head/Rear end	Dieselfde rigting agterkant
Head on	Teenoorgestelde rigting tromp-op
Sideswipe: opposite directions	Teenoorgestelde rigting sykant
Sideswipe: same direction	Dieselfde rigting sykant
Turn left from wrong lane	Dieselfde rigting links draai
Turn right from wrong lane	Dieselfde rigting regs draai
Turn right in face of oncoming traffic	Teenoorgestelde rigting regs draai
Approach at angle-both travelling straight	Benader teen hoek beide reguit
Approach at angle-one or both turning	Benader teen hoek een/beide draai
Reversing	Agteruitry
Single vehicle overturned	Enkel voertuig omgeslaan
Accident with pedestrian	Botsing met voetganger
Accident with animal	Botsing met dier
Accident with train	Botsing met trein
Accident with fixed object	Botsing met vaste voorwerp
Other or unknown accident	Ander tipe of onbekende ongeluk
Turn left/right from wrong lane	Dieselfde rigting links/regs draai
Other: Vehicle left road	Ander: Voertuig verlaat pad
Accident type	Ongelukstipe
Negligence	Nalatigheid

P in road (Pedestrian in road)	Voetganger in pad
Vehicle problem	Voertuigprobleem
Animal in road	Dier in pad
Liquor suspected	Alkoholgebruik vermoed
Road problem	Padprobleem
Driver	Bestuurder
Pedestrian	Voetganger
Other	'n Ander bestuurder wat onbekend is
Pfault (Person at fault)	Skuldige persoon
Unknown pfault	Onbekende skuldige persoon

1. Inleiding

1.1 Probleemstelling

Padongelukke in Suid-Afrika bly 'n probleem, ten spyte van verskeie veldtogte soos Arrive Alive wat geloods word. In 2003 het noodlottige padongelukke Suid-Afrika R8020,24 miljoen gekos (Departement van Vervoer, 2004). Suid-Afrika stuur af op 'n finansiële ramp weens die aantal sterftes wat jaarliks op nasionale paaie plaasvind (Die Burger, 2004).

Volgens die Wêreld Gesondheid Organisasie gaan die ongeluk-situasie verder versleg. Tabel 1.1 wat volg, wys dat beserings weens verkeersongelukke die 9de grootste oorsaak van verlies aan ongeskiktheid-aangepaste lewensjare was in 1998. Ongeskiktheid-aangepaste lewensjare is 'n persoon se lewensjare wat aangepas (verkort) is met die inagneming van ongeskiktheid weens siekte of besering. Die tabel is van toepassing op ontwikkelende lande, wat Suid-Afrika insluit. Daar word voorspel dat beserings weens verkeersongelukke teen 2020 die 3de plek sal inneem in hierdie verband (Krug, 2002).

Tabel 1.1 Ongeskiktheid-aangepaste lewensjare verlore vir die 10 grootste oorsake (Krug, 2002)

1998 Siekte of besering	2020 Siekte of besering
1. Onderste lugweg infeksies	1. Isgemiese hartsiekte
2. HIV/Vigs	2. Unipolêre Major Depressie
3. Perinatale toestande	3. *Padongeluk beserings*
4. Diarree siektes	4. Serovaskulêre siekte
5. Unipolêre Major Depressie	5. Kroniese obstruktiewe longsiekte
6. Isgemiese hartsiekte	6. Onderste lugweg infeksies
7. Serovaskulêre siekte	7. Tuberkulose
8. Malaria	8. Oorlog
9. *Padongeluk beserings*	9. Diarree siektes
10. Kroniese obstruktiewe longsiekte	10. HIV/Vigs

1.2 Agtergrond

'n Groot aantal ongelukke het die afgelope paar jaar op die R44 in die Wes-Kaap plaasgevind. Berigte, asook briewe van die publiek, word gereeld hieroor in 'n plaaslike koerant, Eikestadnuus, gepubliseer (Bylaag A). Motoriste is bekommerd oor die hoë ongelukssyfer van die pad en is van mening dat die pad gevaarlik is (Hunting, 2003).

Wetstoepassers het egter hul hande vol met bestuurders wat die spoedgrens oortree (Nuusredaksie: Eikestadnuus, 2004). Benewens die feit dat bestuurders die spoedgrens oortree, is die R44 oorspronklik vir 'n laer spoedgrens ontwerp as wat tans toegepas word (Smith, 2003).

1.3 Doelstellings

Hierdie studie se doelstellings is:

- Bepaling van die oorsake van die ongelukke wat op die R44 plaasgevind het in die studieperiode (hoofstuk 4.2).
- Opstel van risikofaktore (menslike-, omgewings- en voertuigfaktore) vir elke ongelukstipe wat voorgekom het, wat in die praktyk as 'n verwysingspunt gebruik kan word (hoofstuk 5.1).
- Opstel van aanbevelings om ongelukke in die toekoms op die R44 en op ander paaie te voorkom (hoofstuk 6.2).

1.4 Metodiek

Die metodiek van hierdie studie is om die oorsake van die ongelukke op die R44 vanaf die ongeluksvorms af te lei (hoofstuk 3.1.1.2), en verwantskappe met die oorsake te verkry met ander veranderlikes (hoofstuk 3.2 en 4.4). Die ander veranderlikes is verkry van die ongeluksvorms (byvoorbeeld ongelukstipe of uur

wat die ongeluk plaasgevind het). In die opstel van risikofaktore is die volgende inligting gebruik: kennis opgedoen deur die analise van die ongeluksvorms, verwantskappe wat bepaal is en bydraende faktore tot padongelukke wat in die literatuur beskryf word. Daar is ook in hierdie studie gekyk of die spasiëring van die toegangspaaie op die R44 'n moontlike oorsaak van ongelukke is (hoofstuk 3.1.4, 5.4 en 6.3).

Kaarte wat toon waar die R44 geleë is kan in hoofstuk 3.1 besigtig word.

Die woord "ongeluksvorm" waarna deurgaans in hierdie studie verwys word, is die "OAR" v orm (Officer's A ccident Report)/ "AR" v orm (Accident Report), wat verkeerspolisie by 'n ongelukstoneel of die polisie by die polisiestasie invul.

1.5 Beperkings

Die beperkinge van die studie is die klein datagroep weens die beperkte inligting beskikbaar en die bedenklike datakwaliteit. Hierdie beperkinge het die aantal moontlike verwantskappe verminder wat die bepaling van die risikofaktore bemoeilik het. Probleme wat met die datakwaliteit ondervind is, word in hoofstuk vier omskryf. Aanbevelings om die datakwaliteit te verbeter word in hoofstuk 6.1 beskryf.

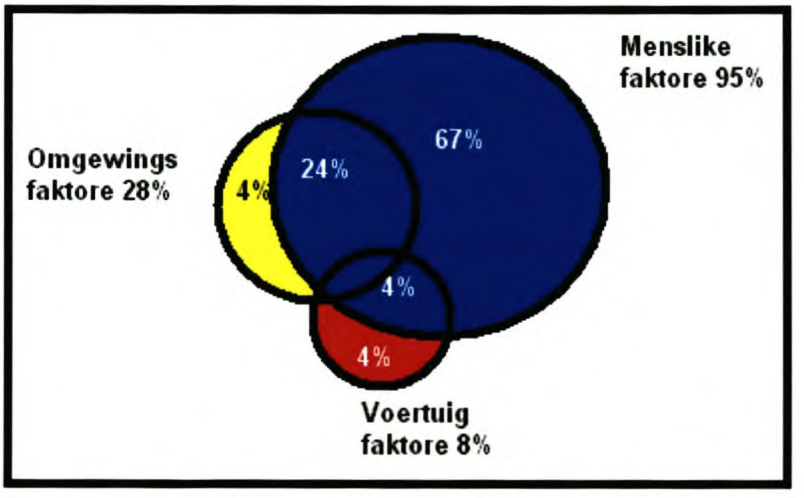
2. Literatuurstudie

Volgens Austroads (1994) word padongelukke deur een faktor of 'n kombinasie van faktore veroorsaak. Die drie oorkoepelende risikofaktore word geklassifiseer as:

- Menslike faktore
- Voertuigfaktore
- Omgewingsfaktore

Menslike faktore word beskryf as dit wat die betrokke persoon/persone gedoen of nie gedoen het nie. Voertuigfaktore verwys na die ontwerp of meganiese foute van die betrokke voertuig/voertuie, wat 'n gebrek aan instandhouding insluit. Omgewingsfaktore sluit die padontwerp, konstruksiewerk op die pad, weersomstandighede, beligting en padverkeerstekens in.

In Australië is navorsing gedoen oor die persentasie wat elke risikofaktor tot ongelukke bydra. Figuur 2.1 stel die navorsing voor, wat wys dat 95% van die faktore wat tot ongelukke bydra, alleen of tesame met menslike faktore gepaard gaan. Daar kan dus afgelei word dat baie ongelukke voorkom kan word.

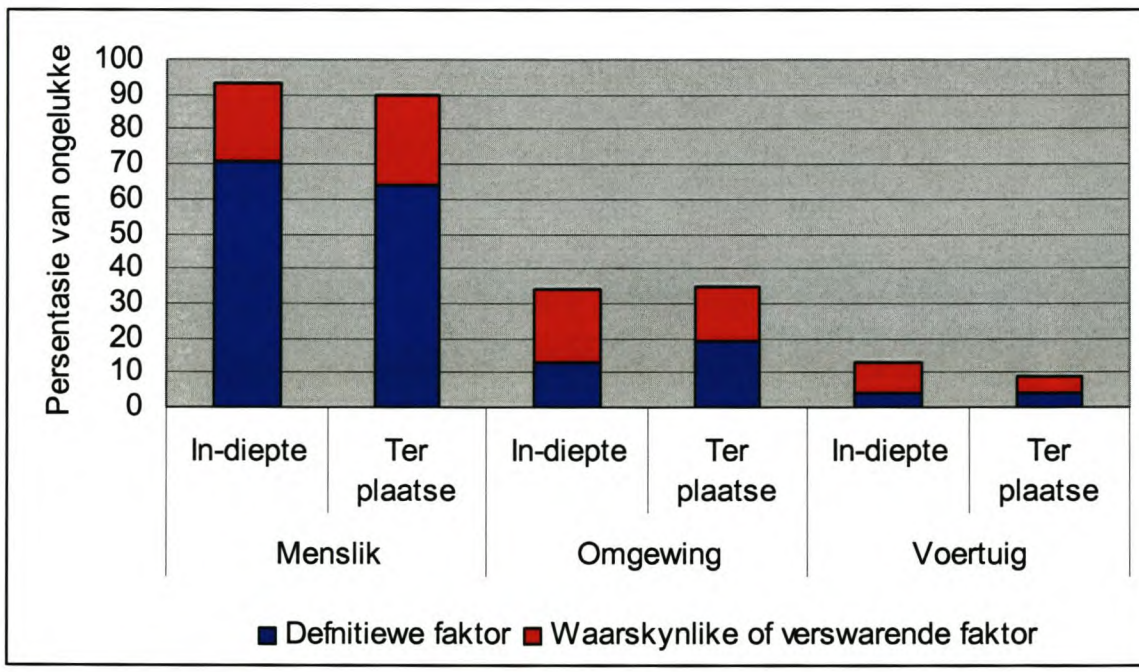


Figuur 2.1 Faktore wat bydra tot voertuig ongelukke (Austroads, 1994)

Die sogenaamde "Tri-Level Study" is in 1972 tot 1977 onderneem by die Indiana Universiteit in Amerika (Treat, JR. *et al.* 1979). Die volgende hoeveelhede ongeluksdata is ondersoek:

- 13 568 ongeluksvorms
- 2 258 ter plaatse ondersoeke
- 420 in-diepte ondersoeke

Faktore wat ongelukke veroorsaak, is as definitief, waarskynlik of moontlik geklassifiseer. Figuur 2.2 wys dat die menslike faktor die beduidendste faktor is.



Figuur 2.2 Faktore wat bydrae tot ongelukke volgens die "Tri-Level Study" (Treat, JR. *et al.* 1979)

Die menslike faktor wat ongelukke veroorsaak, sluit die volgende kenmerke in:

- te hoë spoed
- spoed nie geskik vir situasie nie
- verkeersoortredings
- alkohol en ander dwelmmiddels
- nalatigheid
- bestuurdersfoute
- ouderdom

Die span wat die in-diepte ondersoeke uitgevoer het, kon 20% van die ongelukke se definitiewe oorsake, nie aflei nie. Die span wat die ter plaatse ondersoeke uitgevoer het, kon 26% van die ongelukke se definitiewe oorsake nie aflei nie. Die ter plaatse span kon egter een of meer waarskynlike oorsake in meeste van die gevalle bepaal (Treat, JR. *et al*. 1979).

In hierdie studie om die oorsake van ongelukke deur middel van die analise van die ongeluksvorms af te lei, kon 9% van die ongelukke se oorsake nie bepaal word nie. In hierdie studie is ongelukke se oorsake slegs as die mees waarskynlike oorsaak bepaal. Daar kon dus meer oorsake afgelei word as in die "Tri-Level Study", maar 'n moontlike gebrek aan ondervinding kon 'n rol gespeel het.

Volgens die Departement van Vervoer (2004), dra die volgende faktore by tot ongelukke:

- Menslike faktore (70-80%)
- Voertuigfaktore (10-15%)
- Omgewingsfaktore (5-10%)

Daar kan uit die literatuur gelet word dat in Suid-Afrika voertuigfaktore 'n groter faktor is in die oorsake van ongelukke as omgewingsfaktore. Dit is in teenstelling met die bogenoemde studies gedoen in Australië en Amerika.

Alhoewel in hierdie studie voertuig- en omgewingsfaktore se persentasies min verskil het, kan die rede vir Suid-Afrika se hoë persentasie voertuigfaktore toegeskryf word aan voertuie (veral ou voertuie) wat nie in 'n goeie toestand gehou word nie. Een uit tien voertuie op die land se paaie word as onveilig beskou (Departement van Vervoer, 2004).

Die Departement van Vervoer (2004), wat die Arrive Alive veldtog organiseer, beweer dat meer as 95% van alle padongelukke as 'n direkte gevolg van 'n verkeersoortreding plaasvind. Twee of meer gelyktydige verkeersoortredings is die grootste oorsaak van ongelukke in Suid Afrika. Swak padgedrag speel dus 'n groot rol in padongelukke in Suid Afrika.

Daar is baie literatuur beskikbaar om 'n volledige veiligheidsoudit op 'n pad of 'n netwerk van paaie te doen. Hierdie studie is nie 'n veiligheidsoudit op die R44 nie, omdat daar nie na alle veiligheidsaspekte van die R44 gekyk is nie.

3. Metodes

3.1 Data versameling

By die Provinsiale Administrasie Wes-Kaap (PAWC) is 'n lys verkry van al die ongelukke op hul databasis, wat op die R44 tussen Somerset-Wes en Klapmuts plaasgevind het tussen Oktober 1999 tot September 2003.

In figuur 3.1.1 wat volg kan die ligging van die R44 in die Wes-Kaap gesien word. Net buite Somerset-Wes, asook net verby Klapmuts (dus net buite die studiegedeelte), kruis die R44 die N2, en die N1 onderskeidelik.

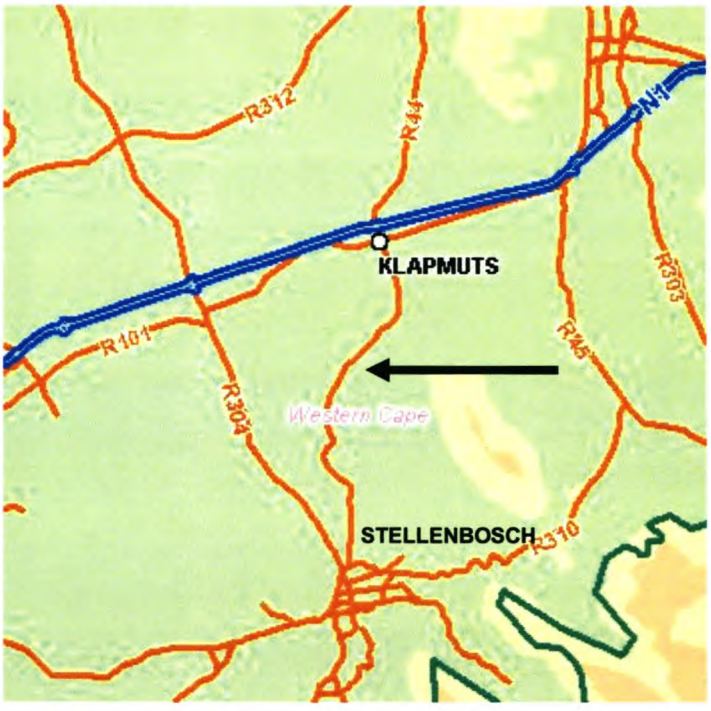
Figuur 3.1.1 Ligging van die R44 in die Wes-Kaap (Big Media, 2004)

Figuur 3.1.2 toon 'n vergroting van die ligging van die R44, vir die padseksie tussen Somerset-Wes en Stellenbosch. Somerset-Wes kan in die suide van die kaart gesien word, en in die noorde waar 'n aantal paaie bymekaar kom, is Stellenbosch. Die padseksie tussen Somerset-Wes en Stellenbosch het vier lane.

Figuur 3.1.2 Ligging van die R44 tussen Somerset-Wes en Stellenbosch (Big Media, 2004)

Figuur 3.1.3 toon 'n vergroting van die ligging van die R44, vir die padseksie tussen Stellenbosch en Klapmuts. Klapmuts kan in die noorde van die kaart gesien word, en in die suide waar 'n aantal paaie bymekaar kom, is Stellenbosch. Die padseksie tussen Stellenbosch en Klapmuts het twee lane.

Figuur 3.1.3 Ligging van die R44 tussen Stellenbosch en Klapmuts (Big Media, 2004)



Die meeste ongeluksvorms van die ongelukke wat in hierdie tydperk plaasgevind het, was by die PAWC beskikbaar. Die res van die ongeluksvorms was verkrygbaar by die Stellenbosch Verkeersdepartement. Die rede vir die verskillende tuistes van die ongeluksvorms is verskillende jurisdiksie oor die pad.

Vanaf die ongeluksvorms is die oorsake van die ongelukke afgelei, en ander ongeluksdata soos die tyd van die ongeluk en die padtoestand was onttrek van die databasis.

Daar is later gepoog om meer inligting te kry, soos die model en fabrikaat van die voertuie wat betrokke was in die ongelukke, maar dit was nie moontlik nie weens 'n tekort aan personeel by die PAWC.

Die redes waarom daar na die vorms self gekyk is, is soos volg:

1. Dit sou 'n aanduiding gee van hoe akkuraat die inligting op die ongeluksvorms in die rekenaarsisteem ingevoer is.
2. Dit sou duidelik wees hoe deeglik en akkuraat die ongeluksvorms ingevul is.
3. Omdat daar gepoog is om die ongelukstipe met ander faktore te korreleer, moes verseker word dat ongelukstipe reg geklassifiseer is.
4. Die moontlike oorsaak en die skuldige party van die ongelukke moes afgelei word.
5. Addisionele inligting is bekom soos bestuurders wat van ander lande afkomstig is.

3.1.1 Analise van ongeluksvorms

3.1.1.1 Klassifikasie van ongelukke

Voorbeelde van die "OAR"- en "AR"vorms kan in bylaag I besigtig word. Die vorm wat tans in gebruik is en die nuuste vorm is, is die "AR"vorm. Die deel van die "AR" vorm wat ingevul moet word beslaan twee A4 bladsye (beide kante), dus vier A4 blaaie. Daar word later in hierdie verslag in hoofstuk 4.3.7 opgemerk dat die vorm moontlik te lank is, en te lank neem om in te vul.

Die ongeluksvorm onderskei tussen die volgende ongelukstipes:

- Dieselfde rigting agterkant
- Teenoorgestelde rigting tromp-op

- Teenoorgestelde rigting sykant
- Dieselfde rigting sykant
- Dieselfde rigting links draai
- Dieselfde rigting regs draai
- Teenoorgestelde rigting regs draai
- Benader teen hoek beide reguit
- Benader teen hoek een/beide draai
- Agteruitry
- Enkel voertuig omgeslaan
- Botsing met voetganger
- Botsing met dier
- Botsing met trein
- Botsing met vaste voorwerp
- Ander tipe of onbekende tipe ongeluk

Daar is na die volgende inligting op die ongeluksvorm gekyk om die ongeluk te klassifiseer:

- voetgangers (afdeling 27 “OAR”/ ”AR” of beskrywing), fietsryers (afdeling 33.15 “OAR”/ ”AR” of beskrywing) of diere (beskrywing) in die pad
- of daar in ’n voorwerp (relings/ sypaadjie/ mediaan/ rots/ boom/ brug/ robot/ paal) vasgery is (beskrywing of skets)
- wat die bestuurder/s besig was om te doen (afdeling 36 “OAR”/ ”AR” of beskrywing)
- waar die skade aan die voertuig is (afdeling 38 “OAR”/ ”AR”)
- die skets (indien geteken)

Die oorspronklike analise rakende klassifikasie van ongeluk, moontlike oorsaak van ongeluk en skuldige party verskyn in bylaag B. In bylaag B verskyn ook inligting rakende die spoedbeperking waar die ongelukke plaasgevind het en die

ligging van die ongeluk. Dit is egter nie volledig nie, want daar is tydens die analise van die ongeluksvorms opgemerk dat die liggings waar die ongelukke plaasgevind het, nie akkuraat op die ongeluksvorms weergegee word nie. Die probleme wat met die data kwaliteit ervaar is, word in hoofstuk 4.3 bespreek.

As daar meer as een ongelukstipe per ongeluk plaasgevind het (byvoorbeeld 'n Dieselfde rigting sykant, gevolg deur 'n Botsing met vaste voorwerp), is die ongeluk volgens die 1ste ongelukstipe geklassifiseer.

Die volgende 14 tipes ongelukke het op die R44 in die tydperk Oktober 1999 tot September 2003 plaasgevind:

- Dieselfde rigting agterkant
- Teenoorgestelde rigting tromp-op
- Teenoorgestelde rigting sykant
- Dieselfde rigting sykant
- Dieselfde rigting links/regs draai
- Teenoorgestelde rigting regs draai
- Benader teen hoek beide reguit
- Agteruitry
- Enkel voertuig omgeslaan
- Botsing met voetganger
- Botsing met dier
- Botsing met vaste voorwerp
- Ander: Voertuig verlaat pad
- Benader teen hoek een/beide draai

Tydens hierdie studie is 34 ongeluksvorms se klassifikasies verander om die ongelukstipes te verminder en om die ongelukke meer akkuraat te definieer (Bylaag C). Die vermindering van ongelukstipes verhoog die statistiese beduidendheid van die studie deurdat ongelukstipes met klein frekwensies

uitgeskakel word. Hierdie 34 klassifikasies wat verander is, val nie onder die 76 foutiewe klassifikasies nie, omdat die persoon wat die ongeluksvorm ingevul het nie 'n fout begaan het nie. Daar is byvoorbeeld nie 'n ongelukstipe op die ongeluksvorm om 'n ongeluk met 'n fietsryer, of 'n ongeluk waar die voertuig van die pad geloop het, te beskryf nie.

Hiervolgens is vier ongelukke wat in die Dieselfde rigting regs draai en Dieselfde rigting links draai kategorieë voorgekom het, in 'n nuwe kategorie Dieselfde rigting links/regs draai geplaas.

Ongelukke waarin fietsryers betrokke was, is op die ongeluksvorms as Ander tipe ongeluk geklassifiseer. Die vier ongelukke wat in hierdie kategorie voorgekom het is in die kategorie Botsing met voetganger geplaas.

Ongelukke waarin los voorwerpe in voertuie vasgewaai het (byvoorbeeld vrag vanaf 'n vragmotor) is op die ongeluksvorms as Ander en Onbekende tipe ongelukke geklassifiseer. Hierdie klassifikasies is verander na die klassifikasie Botsing met vaste voorwerp. Vyf uit 40 Botsing met vaste voorwerp-ongelukke is waarlik ongelukke met los voorwerpe.

Daar is 'n kategorie geskep vir voertuie wat van die pad af geloop het, naamlik Ander: Voertuig verlaat pad, omdat daar 21 sulke gevalle was.

Verskeie ongelukke wat verkeerdelik deur die verkeerspolisie of die polisie geklassifiseer is, is reggestel. Ongelukstipes is slegs verander as dit baie duidelik was uit die inligting op die ongelukvorm dat die oorspronklike ongelukstipe verkeerd was. Daar was 76 regstellings uit 404 ongelukke (Bylaag D). Die ongelukstipes wat oor die grootste aantal foutiewe klassifikasies beskik, is die volgende:

- Onbekende tipe ongeluk (20 ongelukke)
- Ander tipe ongeluk (19 ongelukke)
- Teenoorgestelde rigting sykant (13 ongelukke)

Die ongelukstipes waarna die grootste aantal foutief geklassifiseerde ongelukke verander is, is soos volg:

- Dieselfde rigting sykant (22 ongelukke)
- Botsing met vaste voorwerp (14 ongelukke)
- Teenoorgestelde rigting sykant (8 ongelukke)
- Dieselfde rigting agterkant (8 ongelukke)

3.1.1.2 Moontlike oorsaak en skuldige party

Nadat die oorsake van die ongelukke bepaal is van die ongeluksvorms, is die moontlike oorsake gegroepeer in die volgende sewe oorsake. Die sewe oorsake is ook onder menslike-, voertuig-, omgewings-, en onbekende faktore gegroepeer. Die moontlike oorsake van ongelukke op die R44 is soos volg:

Menslike faktore

- nalatigheid
- voetganger in pad
- alkoholgebruik vermoed

Voertuigfaktore

- voertuigoorsaak

Omgewingsfaktore

- slegte padoppervlakte
- dier in pad

Onbekende faktore

- onbekende oorsaak

Die afleiding van die oorsaak van 'n ongeluk is gemaak deur te kyk na die inligting op die ongeluksvorm, waarvan die volgende die beduidendste was:

- diere of voetgangers in pad (afdeling 27 "OAR"/ "AR" of beskrywing)
- die bestuurder/s se verklaring/s (afdeling 8.2 en/of 8.3 "OAR"/ "AR")
- die verkeersbeampte se verklaring (afdeling 81 "OAR"/ "AR")
- die skets (indien geteken) (afdeling 80 "OAR"/ "AR")
- skade aan die voertuig soos 'n gebarste band (afdeling 41 "AOR"/ "AR" of beskrywing)
- wat die bestuurder/s besig was om te doen (afdeling 36 "OAR"/ "AR" of beskrywing)

Die oorsaak van 'n ongeluk kan nie as spoed aangedui word as daar nie 'n bewys van 'n spoedlesing is nie. Die remmerke kan wel as 'n indikasie van die spoed gebruik word, maar ingevulde ongeluksvorms dui selde metings van remmerke aan. Daarom kan die oorsaak van meeste ongelukke net as nalatigheid geklassifiseer word.

Die oorsaak van 'n ongeluk kan ook nie as alkohol aangedui word indien daar nie 'n alkoholtoets op die bestuurder uitgevoer was, en dat die alkoholvlak te hoog gevind is, nie. Slegs op een ongeluksvorm was 'n saaknommer aangedui (6874) wat wys dat die bestuurder se alkoholvlak getoets is en te hoog was. Op sommige vorms is alkoholgebruik vermoed/getoets gemerk, maar nie 'n

saaknommer nie. In sulke gevalle is die oorsaak van die ongeluk slegs as alkoholgebruik vermoed geklassifiseer.

Slegs 'n klein aantal vorms het aangedui dat selfoongebruik deur die bestuurder 'n moontlike oorsaak van 'n ongeluk was en dus is selfoongebruik nie as 'n moontlike oorsaak van ongelukke geklassifiseer nie.

'n Ongeluk kan om verskeie redes as nalatigheid geklassifiseer word. Dit is wanneer die bestuurder of voetganger nalatig optree en 'n ongeluk veroorsaak. Die ongeluk kon dus verhoed gewees het as die persoon nie nalatig was nie. Voorbeelde van nalatigheid sluit in:

- As 'n bestuurder nie sien die bestuurder voor hom/haar verminder spoed om te stop of gebruik sy/haar flikkerlig om te draai nie, en hy/sy ry in die ander bestuurder vas.
- As 'n bestuurder die motor voor hom/haar verbysteek terwyl die afstand beskikbaar te kort is en 'n motor/motors in die aankomende verkeer getref word.
- As 'n bestuurder verbysteek in dieselfde rigting en die motor wat verbygesteek word, word getref.
- As 'n bestuurder skielik rem en/of afdraai sonder om die flikkerlig te gebruik en 'n ongeluk veroorsaak.
- As 'n bestuurder wag om af te draai (met sy flikker aan) en 'n verbygaande motoris tref hom/haar.
- As 'n pad binnegekom word terwyl dit onveilig is.
- As 'n bestuurder/voetganger die pad gevaarlik oorsteek.
- As 'n bestuurder te vinnig ry en sy/haar kar omgooi.
- As 'n bestuurder in die verkeerde baan ry of wydsbeen oor die middelstreep ry.
- As 'n bestuurder te vinnig wegtrek by 'n stop en agter in die motor wat voor hom/haar is, vasry.

- As 'n bestuurder die sypaadjie/ relings/ lamppaal tref.
- As 'n bestuurder se voet per ongeluk van die rem afgly tot op die petrolpedaal.
- As 'n bestuurder 'n gevaarlike/onwettige U-draai maak.
- As 'n bestuurder 'n voetganger/fietsryer in die geelstreep raakry.
- As 'n bestuurder 'n rooi verkeerslig ignoreer.
- As 'n bestuurder beheer oor die voertuig verloor.
- As 'n bestuurder moeg was of aan die slaap geraak het tydens 'n ongeluk en dit die ongeluk veroorsaak het.
- As 'n bestuurder nie die vrag op sy vragmotor behoorlik vasgemaak het nie en dit gaan verlore tydens 'n reis.

Opsommend verwys nalatigheid na alle ongelukke waar daar nie 'n ander definitiewe oorsaak van die oorsaak gevind kan word nie (soos byvoorbeeld 'n band wat bars of voetganger/dier in pad). Ongelukke wat deur nalatigheid veroorsaak is, sluit egter ongelukke waar die oorsaak onbekend was, uit.

'n Ongeluk se oorsaak word as dier in pad geklassifiseer as daar 'n dier in die pad was wat die ongeluk veroorsaak het.

'n Ongeluk se oorsaak word as voetganger in pad geklassifiseer as 'n voetganger/s die pad kruis of gevaarlik in die pad loop en 'n ongeluk veroorsaak.

'n Ongeluk se oorsaak word as slegte padoppervlakte geklassifiseer as die volgende op die pad voorgekom het en 'n ongeluk veroorsaak het:

- 'n ongelukstoneel
- olie, water of klip op die pad
- padwerke
- slegte padmerkings
- verskuilde padteken

Hierdie faktore kon slegs in ag geneem word as dit duidelik op die ongeluksvorm aangedui is. Daar is nie in hierdie studie na die R44 se padbelyning (soos byvoorbeeld sigafstand) gekyk nie. Dit sou, weens die kwaliteit van die kilometer-lesings soos in hoofstuk 4.3 bespreek word, onmoontlik wees om die presiese ligging van elke ongeluk ter plaatse te ondersoek, en dan op daardie plek die oorsaak van die ongeluk moontlik te herlei na 'n belyningsprobleem.

'n Ongeluk se oorsaak word as voertuigoorsaak geklassifiseer wanneer die volgende gebeur het:

- 'n band het gebars (14 ongelukke)
- die remme het gefaal (8 ongelukke)
- die stuurwiel het gesluit
- die ligte was foutief
- 'n trok knipmes
- 'n vragmotor se stang het gebreek
- wanneer die oorsaak onbekend was maar wel deur 'n voertuigprobleem veroorsaak was (2 ongelukke)

Die oorsaak van 'n ongeluk kan onbekend wees as onvoldoende inligting op die vorm aangeteken is (35 ongelukke).

Die skuldige party kan die bestuurder, die voetganger/s, 'n ander onbekende bestuurder, 'n dier, die pad, die voertuig, of onbekend wees. Die bestuurder word geklassifiseer as 'n ander onbekende bestuurder as sy inligting nie op die vorm ingevul is nie, weens die feit dat hy nie op die ongelukstoneel agtergebly het nie.

3.1.1.3 Uitsluiting van data

Na aanleiding van hierdie studie vir die tydperk tussen 1 Oktober 1999 tot 31 September 2003, is alle ongelukke vanaf die PAWC se databasis getrek vir die R44, vir seksie 1 vanaf km 0.05km tot 76.1km. Daar was 594 ongelukke. Hierdie studie ondersoek slegs die padgedeelte van die R44 vanaf Somerset-Wes se Munisipale Grens tot by die Klapmuts 4-rigting kruising, wat volgens Provinsiale Administrasie Wes-Kaap (2003) vanaf 21.37km tot 51.15km is. Ongelukke binne Stellenbosch se munisipale gebied (tussen 31.2km en 36.2km), op die toegangspaaie tot die R44 en ongelukke buite die studiegebied is uitgesluit by hierdie studie. Daar is gevind dat verskeie ongelukke op die toegangspaaie tot die R44 by die aansluiting met die R44 gebeur het, wat egter op die databasis lyk of dit op die R44 gebeur het. Dit is agtergekom toe die ongeluksvorms ontleed is.

468 ongelukke wat tussen Somerset-Wes en Klapmuts in die studietydperk gebeur het, is geanaliseer. Weens 'n agterstand met data-invoering in die PAWC se databasis, kon 64 ongelukke se data van die veranderlikes nie van die databasis verkry word nie. Dit het die ongeluksgetal op 404 te staan gebring.

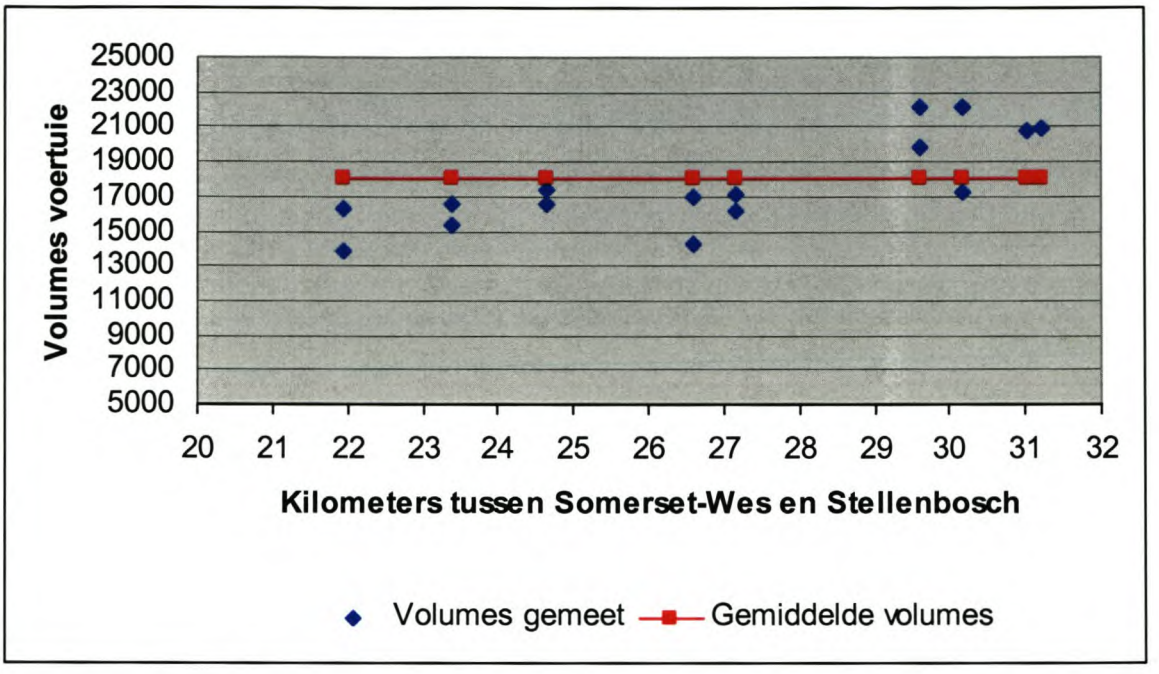
3.1.2 Volumes en ongelukskoers

Inligting oor die volumes voertuie op die R44 tussen Somerset-Wes en Klapmuts is van die *Road Network Information Reports Menu* (2004) van die Provinsiale Administrasie van die Wes-Kaap op die Internet verkry. Daar is op 13 plekke/kruisings tussen Somerset-Wes en Klapmuts met outomatiese metodes verkeer getel. By al 13 plekke/kruisings is daar in 2000 getel, maar by sommige plekke/kruisings is daar ook in 2002 en 2003 getel. Die GDV-waardes (gemiddelde daaglikse verkeer) by die 13 plekke/kruisings op die R44 in die verskeie jare kan gesien word in Bylaag E.

By die kruisings is elke been van die kruising se verkeer getel. In totaal was daar by 41 plekke/bene verkeer getel. Daar kan van die volumes gesien word dat slegs by vier plekke/bene die verkeer afgeneem het toe nuwe tellings in 2000 gemaak is (Hoopenberg Westelike been, Audacia Oostelike been, Annandale Suidelike been en Annandale Westelike been). By al die ander plekke/bene op die R44 het die volumes verkeer toegeneem in 2000, 2002 en 2003. Vanaf 2000 tot 2002 en 2003 het die GDV met persentasies tussen 1.8% (Annandale Oostelike been) en 63.1% (Eikendal Oostelike been) toegeneem. By nege uit die 14 plekke/bene het die GDV tussen 2000 en 2002/2003 met meer as 10% toegeneem.

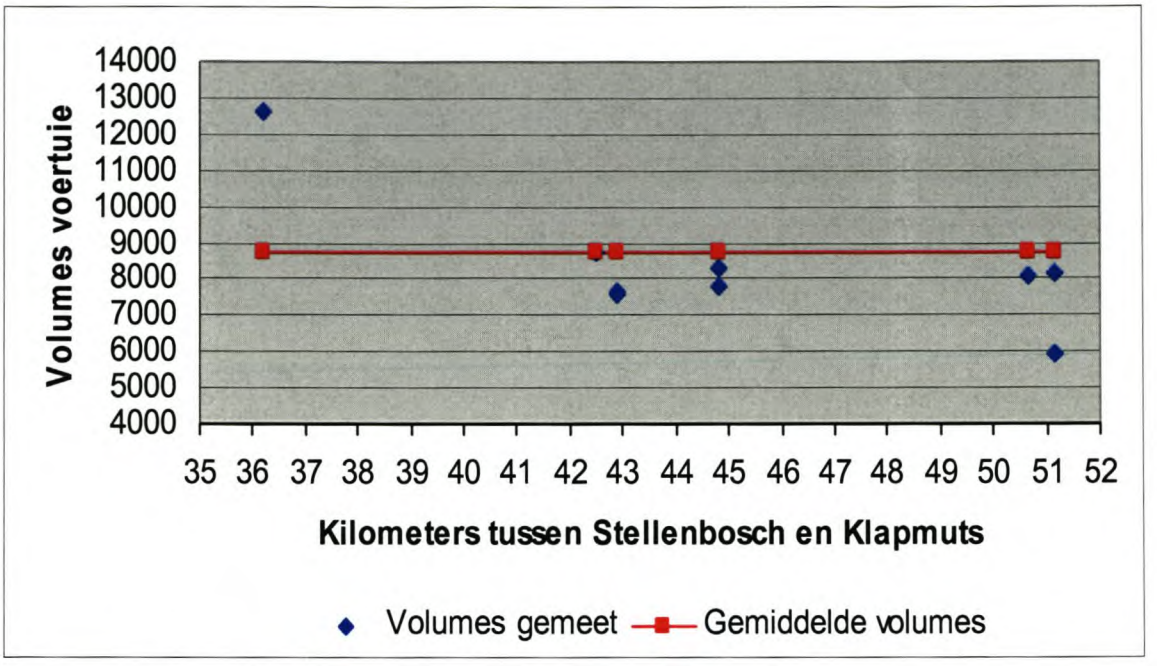
Die twee padseksies hier ter sprake is eerstens tussen Somerset-Wes en Stellenbosch (21.37km tot 31.2km), en tweedens tussen Stellenbosch en Klapmuts (36.2km tot 51.15km).

In figure 3.1.2.1 en 3.1.2.2 kan die verkeersvolumes per dag van die twee padseksies vir die jaar 2000 op die y-as gesien word. In figuur 3.1.2.1 is die volumes voertuie in die rigting vanaf Somerset-Wes na Stellenbosch geteken vanaf die oorsprong van die grafiek. Op figure 3.1.2.1 en 3.1.2.2 is die datapunte op die kilometers aangedui waar die volumes getel is. Die rede waarom daar by sekere kilometers op figure 3.1.2.1 en 3.1.2.2 twee datapunte (volumes voertuie) is, is dat daardie plekke 'n kruising voorstel waar die Noordelike en Suidelike been getel is wat verskillende tellings het.



Figuur 3.1.2.1 Volumes voertuie tussen Somerset-Wes en Stellenbosch (beide rigtings) per dag in die jaar 2000

Daar kan in figuur 3.1.2.1 gesien word dat die gemiddelde volumes nie verteenwoordigend van die gemete volumes voertuie is nie, omdat die gemiddelde volumes nie naby enige gemete volumes lê nie, maar hoër en laer as die gemete volumes is. 'n Geweegde gemiddelde van 16000 vir kilometers 21.37 tot 29.6, en 21000 vir kilometers 29.6 tot 31.2 is eerder gebruik om 'n verteenwoordigende waarde van die gemete volumes te kry vir die ongelukskoersberekening. Hierdie geweegde gemiddelde sal as basis volume vir die jaar 2000 gebruik word.



Figuur 3.1.2.2 Volumes voertuie tussen Stellenbosch en Klapmuts (beide rigtings) per dag in die jaar 2000

In figuur 3.1.2.2 is die volumes voertuie in die rigting vanaf Stellenbosch na Klapmuts geteken vanaf die oorsprong van die grafiek. Die gemiddelde volumes op figuur 3.1.2.2 is effens hoër as die meeste gemete volumes, weens die een hoë volume by kilometer 36.2 wat 'n uitlêer mag wees. Vanaf figuur 3.1.2.2 kan gesien word dat 8000 voertuie per dag 'n geskikte waarde sal wees om te gebruik vir die jaar 2000.

Die ongelukskoers per miljoen voertuig-kilometer is vir 2000, 2001 en 2002 bereken vir die twee padseksies. Omdat daar nie volledige volume data beskikbaar is vir 2001 en 2002 nie, is 'n groeikoers van 10% vanaf 2000 na 2001 en vanaf 2001 na 2002 aangeneem. Die bepaling van die groeikoers is gemaak deur na die toename van verkeer gekyk word vanaf 2000 na die beskikbare volumes in 2002/2003. By nege uit die 14 plekke/bene het die GDV tussen 2000 en 2002/2003 met meer as 10% toegeneem.

Met die ongeluksdata beskikbaar, kon die aantal ongelukke (en dus die ongelukskoers) vir die twee padseksies slegs bepaal word vir 2000, 2001 en 2002, omdat 'n volle jaar se aantal ongelukke benodig word. Die aantal ongelukke per jaar verskyn in tabel 3.1.2.1. Die aantal ongelukke wat in die ongelukskoersberekening gebruik is kan in die formaat wat dit van die databasis verkry is, gesien word in Bylaag E.

Daar kan opgelet word dat die aantal ongelukke in tabel 3.1.2.1 veel minder as die 404 vir Oktober 1999 tot September 2003 (vier jaar) is, al is hierdie aantal slegs vir drie jaar. Die verduideliking hieroor is dat hierdie berekening lank ná die analise van ongeluksvorm gedoen is, en vir hierdie berekening die aantal ongelukke bepaal is deur slegs na die kilometerlesing of kruising-naam te kyk wat van die databasis verkry is. In die oorspronklike analise van die 404 ongeluksvorms is die liggings van die ongelukke verifieer deur die verklarings op die ongeluksvorms na te gaan of die ongeluk in die studiegebied plaasgevind het of nie. Hierdie proses kon ongelukkig weens praktiese redes nie herhaal word vir die berekening van die aantal ongelukke nie.

Daar is dus slegs gekyk of die kilometers tussen 21.37 en 31.2 (tussen Somerset-Wes en Stellenbosch) of tussen 36.2 en 51.15 (tussen Stellenbosch en Klapmuts) val, asook of die ongeluk by 'n kruising binne die twee padseksies gebeur het. Ongeluksliggings wat as "Unknown node" of net 'n (onbekende) plaasnaam aangedui word was uitgesluit is by hierdie berekening omdat dit onnaspeurbaar was. Die aantal ongelukke in die berekening is heel waarskynlik baie meer (die pad is al in die *Eikestadnuus* "Die pad van die dood" genoem), maar die kwaliteit van die data (word bespreek in hoofstuk 4.3) het hierdie aantal ongelukke veroorsaak.

In tabel 3.1.2.1 kan die ongelukskoerse per miljoen voertuig-kilometer vir die twee padseksies gesien word. Daar kan gesien word dat die seksie tussen Klapmuts en Stellenbosch 'n hoër ongelukskoers het as die seksie tussen Stellenbosch en Somerset-Wes.

Tabel 3.1.2.1 Ongelukskoerse vir die twee padseksies

		Stellenbosch en Somerset-Wes	Klapmuts en Stellenbosch
Aantal voertuie	2000	16814	8000
	2001	18495	8800
	2002	20345	9680
Aantal ongelukke	2000	6	26
	2001	23	37
	2002	26	38
Padseksie lengte	km	9.83	14.95
Ongelukskoers per miljoen voertuig-kilometer	2000	**0.10**	**0.60**
	2001	**0.35**	**1.17**
	2002	**0.36**	**1.09**

Deur 336 geteerde padseksies in die Kaap Provinsie se ongelukskoerse te bepaal, is 'n gemiddelde ongelukskoers per miljoen voertuig kilometer van 1.023 verkry (Bester, 1994). Elke padseksie het 'n minimum lengte van 0.5km gehad. Die ongelukskoerse bepaal tussen Stellenbosch en Somerset-Wes is veel laer as hierdie waarde. Die ongelukskoerse op die padseksie tussen Klapmuts en Stellenbosch vir die jare 2001 en 2002 is in dieselfde orde soos Bester (1994) bevind het. Die werklike ongelukskoerse is egter sonder enige twyfel veel hoër as die berekende koerse, asook Bester (1994) se berekende koers, omdat die R44 ernstige verkeersveiligheidsprobleme het, maar die berekende ongelukskoerse volg uit die aantal ongelukke wat weens die bedenklike datakwaliteit (hoofstuk 4.3) nie 'n akkurate weerspieëling van die werklikheid is nie.

Die feit dat die padseksie tussen Klapmuts en Stellenbosch twee lane het, en die padseksie tussen Stellenbosch en Somerset-Wes vier lane het, kan nie as 'n rede vir die verskil in ongelukskoerse tussen die twee padseksies aangegee

word nie, aangesien die aantal lane van 'n pad nie 'n noemenswaardige verskil maak aan die totale hoeveelheid ongelukke nie (Bester, 1994).
Weens die onsekerhede met die ongelukskoers-berekeninge is die grootste nut van die ongelukskoerse nie die berekening van absolute waardes nie, maar die vergelyking van jaarlikse ongelukskoerse om moontlike groot stygings raak te sien.

Die nasionale (Suid Afrika) noodlottige ongelukskoers per 100 miljoen voertuig-kilometer vir 2000, 2001 en 2002 is 5.2, 7.74 en 8.71 (Departement van Vervoer, 2004). Die totale ongelukskoers (wat noodlottige ongelukke insluit) kon nie verkry word nie. Vanaf die inligting op die Departement van Vervoer se webtuiste blyk daar merendeels noodlottige ongeluk-statistieke gepubliseer word.

Alhoewel die aantal sterftes op die R44 vir die studietydperk bekend is uit die ongeluksvorms wat geanaliseer is en die inligting verkry vanaf die datasisteem, kon die noodlottige ongelukskoers van die R44 nie met sekerheid bepaal word nie. Die rede hiervoor is dat die meeste noodlottige ongelukke se kilometerlesings daarop dui dat die ongelukke nie tussen Somerset-Wes en Klapmuts (die studiegebied) plaasgevind het nie. Dit mag wel nié die geval wees nie weens die bedenklike datakwaliteit, maar volgens die inligting beskikbaar sal die berekening van 'n noodlottige ongelukskoers vir die R44 sinneloos en misleidend wees, en word dus nie ingesluit nie.

3.1.3 Spoed data

Daar is tans geen 85ste persentiel spoed beskikbaar nie, maar Stellenbosch Verkeersdepartement is besig om dit vas te stel. Hierdie spoed sou 'n goeie indikator wees van die spoed wat deur die meeste motoriste gehandhaaf word. Deur alle motoriste se spoed te rangskik van stadigste na vinnigste spoed, sal die 85ste persentiel spoed die stadiger 85% van die vinnigste 15% motoriste skei. Die hoogste spoed wat op die R44 gemeet is, was 195km/h.

Volgens Smith (2004) het 1044 bestuurders die spoedgrens op 23 April 2004 by die Annadale-aansluiting (tussen Somerset-Wes en Stellenbosch) oorskry. Daar kon nie spesifieke spoed inligting van Stellenbosch Verkeersdepartement verkry word nie, omdat spoed inligting nie op 'n databasis geplaas word nie.

Volgens die Provinsiale Administrasie Wes-Kaap (2002) se "Road Access Guidelines" word die R44 geklassifiseer as 'n "Semi-Rural Expressway" met 'n bedryfspoed ("Operating speed") van 100km/h.

3.1.4 Toegangspaaie

Daar is ondersoek ingestel of die spasiëring van die toegangspaaie korrek en genoegsaam is. Dit is gedoen omdat dit 'n faktor is wat kon aanleiding gee tot ongelukke, maar nie van die ongeluksvorm afgelei kon word nie.

Die kilometerlesings van die toegangspaaie op die R44 tussen Somerset-Wes en Klapmuts is vanaf Provinsiale Administrasie Wes-Kaap (2003) verkry. Die afstande is tussen al die toegangspaaie bepaal. Dit is in die rigting vanaf Somerset-Wes na Klapmuts, en in die rigting vanaf Klapmuts na Somerset-Wes gedoen. Die berekeninge kan in Bylaag F besigtig word.

Volgens die Provinsiale Administrasie Wes-Kaap (2002) se "Road Access Guidelines" moet die R44 ('n "Semi-Rural Expressway") se toegangspaaie 1600 meter vanaf mekaar wees.

Die afstande wat bereken is tussen die toegangspaaie is vergelyk met die bogenoemde spasiërings wat aanbeveel word. Daar is gevind dat uit die 89 huidige spasiërings van die R44, slegs vier ver genoeg uitmekaar is.

Tussen Somerset-Wes en Stellenbosch is die gemiddelde spasiëring (beide rigtings) 475m en tussen Stellenbosch en Klapmuts is die gemiddelde spasiering (beide rigtings) 451m. In hoofstuk 5.4 word gevolgtrekkings oor die toegangspaaie gemaak.

3.2 Dataverwerking

Die primêre metode om verwantskappe tussen moontlike risikofaktore en tussen risikofaktore en oorsake van ongelukke te ondersoek, was assosiasie-analise. Die ongeluksdata is verwerk met die statistiese programme CBA (2001) en Statistica (2003). Daar is gesoek vir verwantskappe tussen die vlakke van die volgende veranderlikes:

- dag van week
- uur van ongeluk
- voertuigtipe
- ongelukstipe
- oorsaak van ongeluk
- skuldige party
- geslag van skuldige party
- ouderdom van skuldige party
- registrasieplaatletters

Let op dat al die veranderlikes kategoriese veranderlikes met variërende aantal vlakke was. Die vlakke van die veranderlike "ongelukstipe" is byvoorbeeld Dieselfde rigting agterkant, Dieselfde rigting sykant, Botsing met voetganger etc en die vlakke van die veranderlike "oorsaak van ongeluk" is byvoorbeeld nalatigheid, voetganger in pad, onbekend ensovoorts. Die beginsel van die assosiasie-analise was om vlakke van een veranderlike wat "gereeld" saam met vlakke van 'n ander veranderlike voorkom, te identifiseer.
In die verduidelikings van die assosiasie-analise hieronder en in die tabelle 3.2.1, 3.2.2, 3.2.3 en 3.2.4 kom die terme in Engels voor soos dit in CBA (2001) en Statistica (2003) gebruik is. Die vertaalde Afrikaanse terme daarvoor kan onder die "Lys van simbole, vreemde woorde en spesiale terminologie" elders besigtig word.

Die eerste stap van die assosiasie-analise was om met die program CBA alle verwantskappe tussen vlakke van veranderlikes te bepaal. Die vlak van die tweede veranderlike moes meer as 50% saam met die vlak van die eerste veranderlike voorkom. Die 428 verwantskappe wat aan hierdie vereiste voldoen het, is genotuleer. Hierdie CBA-data verskyn in Bylaag G. Daarna is besluit, in oorlegpleging met die Sentrum vir Statistiese Konsultasie, dat die vlak van die eerste veranderlike minstens ongeveer 5% moes voorkom (tesame met die tweede veranderlike) vir die verwantskap om belangrik te wees. Alhoewel die persentasie voorkoms van die vlakke van die veranderlikes laag mag voorkom, is dit gedoen om alle verwantskappe vas te vang, en nie verwantskappe oor te slaan nie. 'n Voorbeeld van die CBA-data word in tabel 3.2.1 gegee en vervolgens verduidelik.

Tabel 3.2.1 Voorbeeld uit CBA-data (totale botsings)

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Accident type	*Light*				
Head/Rear end	Daylight	103	25.5	88	85.4
Sideswipe: same direction	Daylight	56	13.9	50	89.3
Accident with pedestrian	Daylight	42	10.4	28	66.7
Accident with fixed object	Daylight	40	9.9	20	50
Sideswipe: opposite directions	Daylight	35	8.7	21	60
Approach at angle-both travelling straight	Daylight	21	5.2	11	52.4
Turn right in face of oncoming traffic	Daylight	11	2.7	8	72.7
Accident with animal	Night-unlit	18	4.5	10	55.6

In tabel 3.2.1 het die veranderlike "Accident type" die vlakke "Head/Rear end", "Sideswipe: same direction", "Accident with pedestrian" ensovoorts. Die veranderlike "Light" het die vlakke "Daylight" en "Night-unlit". Uit die 404 ongelukke wat geanaliseer is, het "Head/Rear end"-ongelukke 103 keer voorgekom, wat 25.5% (103/404) is van die totaal. Wanneer die vlak "Head/Rear end" voorgekom het (103 keer), het die vlak "Daylight" 88 keer voorgekom. Die vlak "Daylight" het dus 85.4% (88/103) keer voorgekom tesame met die vlak "Head/Rear end".

Die vlak "Accident with animal" het 18 keer uit die 404 ongelukke voorgekom. Tesame met die vlak "Accident with animal" het die vlak "Night-unlit" 10 keer voorgekom, dit wil sê 55.6% (10/18) van die kere. Alhoewel die persentasies laag is, is die verwantskap verder geneem en geverifieer omdat die vlak "Accident with animal" ongeveer 5% voorgekom het, en die vlak "Night-unlit" tesame met die vlak "Accident with animal" 55.6% keer voorgekom het, wat meer as 50% van die kere is. Die verwantskap tussen die vlakke "Turn right in face of uncoming traffic" en Daylight" word egter verwerp omdat die vlak "Turn right in face of uncoming traffic" minder as ongeveer 5% uit die totale kere voorgekom het.

Die 428 verwantskappe vanuit die program CBA is verder met die program Statistica verifieer deur van kruistabulasie gebruik te maak. Dit is gedoen om te

bepaal of twee vlakke wat volgens die assosiasie-analise geneig is om saam voor te kom, wel saam meer voorkom as apart van mekaar. Elke verwantskap is individueel getoets. In bylaag H word die Statistica data getoon. Hierdie verifikasie het die aantal verwantskappe byna halveer vanaf 428 tot 237, en die geverifieerde verwantskappe word getoon in hoofstuk 4.4. Voorbeelde van die Statistica data wat volg vanaf tabel 3.2.1 se CBA-data word in tabelle 3.2.2, 3.2.3 en 3.2.4 gegee en vervolgens verduidelik.

Tabel 3.2.2 Voorbeeld een uit Statistica data (totale botsings)

	Summary Frequency Table (data 2004-06-11.sta in data en voorbeelc Marked cells have counts > 10 (Marginal summaries are not marked)			
	Head/Rear end	daylight no	daylight yes	Row Totals
Count	no	113	182	295
Row Percent		38.31%	61.69%	
Count	yes	15	88	103
Row Percent		14.56%	85.44%	
Count	All Grps	128	270	398

In tabel 3.2.2 kan gesien word dat die vlak "Head/Rear end" 103 keer voorgekom het, en in 88 van die kere het die vlak "Daylight" saam met die vlak "Head/Rear end" voorgekom (85.44%). Wanneer die vlak van die "Accident type" nie "Head/Rear end" was nie (295 kere), het die vlak "Daylight 182 keer voorgekom (61.69%). Die vlakke "Head/Rear end" het "Daylight" het dus meer keer persentasie gewys voorgekom as die vlak "Daylight" saam met 'n ander vlak van die veranderlike "Accident type". Hierdie verskynsel verifieer die verwantskap tussen die vlakke "Head/Rear end" en "Daylight".

Daar kan opgelet word uit tabelle 3.2.2, 3.2.3 en 3.2.4 dat die totale nie 404 is nie, maar 398. Die rede hiervoor is dat daar in die veranderlike "Light" ses ongeluksvorms het waarvan hierdie veranderlike nie ingevul is nie (vermiste data). Hierdie is deurgaans die rede indien die Statistica totale data nie tot 404, 160 en 244 vir onderskeidelik die totale-, enkel- en veel voertuigbotsings optel nie.

In tabel 3.2.3 word die tweede Statistica voorbeeld gegee. Daar kan gesien word dat die vlakke "Accident with animal" en "Night-unlit" persentasie gewys meer saam voorkom as die vlak "Night-unlit" saam met 'n ander vlak van die veranderlike "Accident type" (58.82% teenoor 20.47%). Hierdie verskynsel verifieer die verwantskap tussen die vlakke "Accident with animal" en "Night-unlit" ten spyte van die lae persentasie voorkoms van hierdie vlakke.

Tabel 3.2.3 Voorbeeld twee uit Statistica data (totale botsings)

	Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde Marked cells have counts > 10 (Marginal summaries are not marked)			
	Accident with animal	Night-unlit No	Night-unlit Yes	Row Totals
Count	No	303	78	381
Row Percent		79.53%	20.47%	
Count	Yes	7	10	17
Row Percent		41.18%	58.82%	
Count	All Grps	310	88	398

Tabel 3.2.4 toon die derde voorbeeld van die Statistica data. Daar kan gesien word dat die vlakke "Accident with fixed object" en "Daylight" persentasie gewys minder saam voorkom as die vlak "Daylight" saam met 'n ander vlak van die veranderlike "Accident type" (50% teenoor 69.83%). Hierdie verskynsel beteken dat die verwantskap tussen die vlakke "Accident with fixed object" en "Daylight" nie geverifieer is nie, en dus nie gebruik kan word in die opstel van risikofaktore vir ongelukstipe nie. Ten spyte van die feit dat die vlak "Accident with fixed object" meer voorkom as "Accident with animal is die verwantskap met "Daylight" nie geverifieer nie met Statistica nie. Daar is dus vlakke wat persentasie gewys min voorgekom het, maar wat unieke verwantskappe het.

Tabel 3.2.4 Voorbeeld drie uit Statistica data (totale botsings)

	Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde Marked cells have counts > 10 (Marginal summaries are not marked)			
	Accident with fixed object	daylight no	daylight yes	Row Totals
Count	No	108	250	358
Row Percent		30.17%	69.83%	
Count	Yes	20	20	40
Row Percent		50.00%	50.00%	
Count	All Grps	128	270	398

Die assosiasie-analise is op die volgende ongeluksgroepe uitgevoer: totale botsings (404 ongelukke), enkelvoertuigbotsings (160 ongelukke) en veelvoertuigbotsings (244 o ngelukke). Enkelvoertuigbotsings is wanneer slegs een voertuig in 'n ongeluk betrokke is, en veelvoertuigbotsings as daar meer as een voertuig in 'n botsing betrokke is.

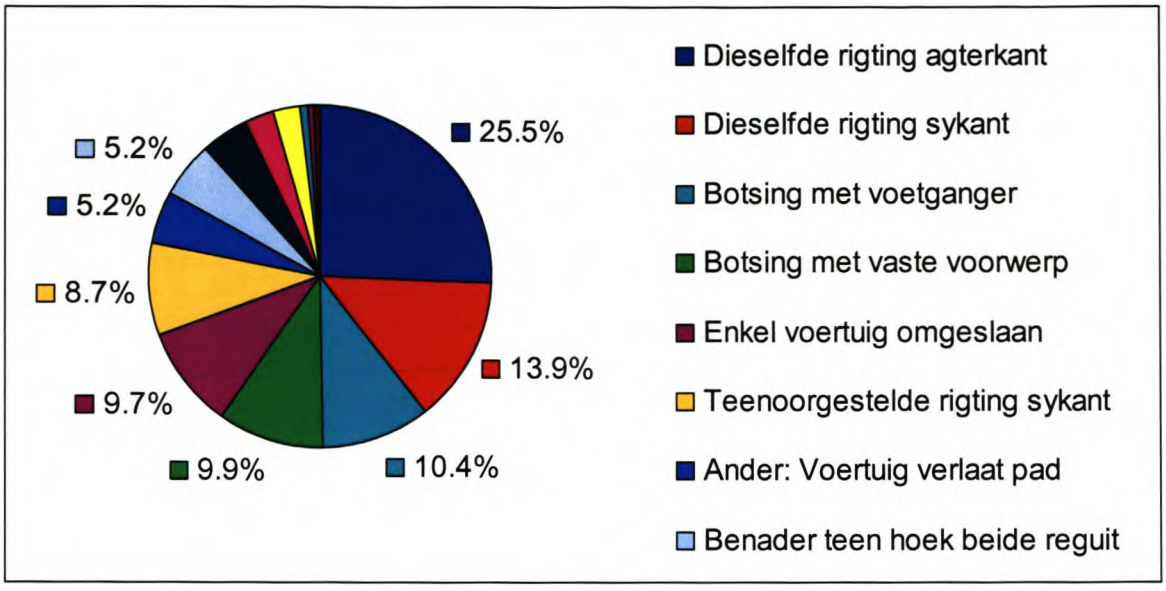
4. Resultate

4.1 Klassifikasies van ongelukstipes

Tabel 4.1.1 en figuur 4.1.1 dui aan hoeveel keer elke ongelukstipe voorgekom het uit die totale 404 ongelukke en in persentasies van die totaal in hierdie studie. In figuur 4.1.1 word slegs die ongelukstipes wat meer as 5% van die totale ongelukke beslaan met 'n byskrif aangedui.

Tabel 4.1.1 Frekwensie van ongelukstipe

Ongelukstipe	Aantal	%
Dieselfde rigting agterkant	103	25.5
Dieselfde rigting sykant	56	13.9
Botsing met voetganger	42	10.4
Botsing met vaste voorwerp	40	9.9
Enkel voertuig omgeslaan	39	9.7
Teenoorgestelde rigting sykant	35	8.7
Ander: Voertuig verlaat pad	21	5.2
Benader teen hoek beide reguit	21	5.2
Botsing met dier	18	4.5
Teenoorgestelde rigting regs draai	11	2.7
Teenoorgestelde rigting tromp-op	10	2.5
Dieselfde rigting links/regs draai	4	1.0
Agteruitry	2	0.5
Benader teen hoek een/beide draai	2	0.5
	404	



Figuur 4.1.1 Frekwensie van ongelukstipe

Die twee tipes ongelukke wat die meeste voorkom, is Dieselfde rigting agterkant (25.5%) en Dieselfde rigting sykant (13.9%).

Die volgende drie tipes ongelukke kom almal ongeveer 10% voor:

- Botsing met voetganger
- Botsing met vaste voorwerp
- Enkel voertuig omgeslaan

Tabel 4.1.2 dui die nasionale (Suid-Afrika) frekwensie van ongelukstipes aan vir 2003 (Departement van Vervoer, 2004). Dit is die enigste jaar waarvoor hierdie inligting verkry kon word. Die ongelukstipes wat as "nie van toepassing" (NVT) gemerk is, se aantal ongelukke kon nie verkry word nie, omdat sekere ongelukstipes saam gegroepeer is in die inligting wat beskikbaar is.

Tabel 4.1.2 Nasionale frekwensie van ongelukstipe (Departement van Vervoer, 2004)

Ongelukstipe	Aantal	%
Botsing met voetganger	4086	40.1
Enkel voertuig omgeslaan	2185	21.4
Teenoorgestelde rigting tromp-op	832	8.2
Dieselfde rigting agterkant	760	7.5
Botsing met vaste voorwerp	382	3.7
Teenoorgestelde rigting regs draai	290	2.8
Teenoorgestelde rigting sykant	148	1.5
Dieselfde rigting sykant	147	1.4
Dieselfde rigting links draai	12	0.1
Botsing met dier	NVT	
Benader teen hoek beide reguit	NVT	
Benader teen hoek een/beide draai	NVT	
Ander: Voertuig verlaat pad	NVT	
Agteruitry	NVT	
	10197	

Daar kan opgelet word deur tabel 4.1.2 met tabel 4.1.1 te vergelyk, dat daar heelwat meer ongelukke met voetgangers in verhouding tot die totale ongelukke landwyd plaasgevind het as in hierdie studie. Die rede vir die kleiner verhouding voetganger ongelukke op die R44 as landwyd kan moontlik wees dat daar geen informele behuising langs die R44 voorkom nie en dat daar nie 'n besondere groot aantrekking bestaan om die pad te kruis nie.

Die ongelukstipe Dieselfde rigting agterkant kom meer in verhouding tot die totale ongelukke voor op die R44 as landwyd. Dit kan dalk toegeskryf word aan die gereelde kruisings op die pad, wat die bestuurder noodsaak om te stop of rem.

Die ongelukstipe Enkel voertuig omgeslaan kom ongeveer dubbeld so veel keer landwyd voor as op die R44. Bester (1994) het bevind dat ongelukke waarin net een voertuig betrokke is se ongelukskoers die meeste (teenoor ander ongelukstipes) deur padeienskappe beïnvloed word. Die landwye statistieke sluit alle paaie, ook grondpaaie, in terwyl die R44 'n geteerde pad is wat meestal

(75%) plat is. Dit kan moontlik die verskil in voorkoms van Enkel voertuig omgeslaan-ongelukke verduidelik.

Indien vergelykings getref word wat aantal ongelukke betref, moet daar in gedagte gehou word dat hierdie studie vier jaar se ongelukke insluit, terwyl die landwye statistieke vir een jaar, 2003, is.

Daar was 30 sterftes uit die 468 ongelukke wat oorspronklik geanaliseer is. Die drie ongelukstipes met die meeste sterftes is soos volg met elkeen se aantal sterftes in hakies:

- Botsing met voetganger (11)
- Teenoorgestelde rigting tromp-op (9)
- Botsing met vaste voorwerp (3)

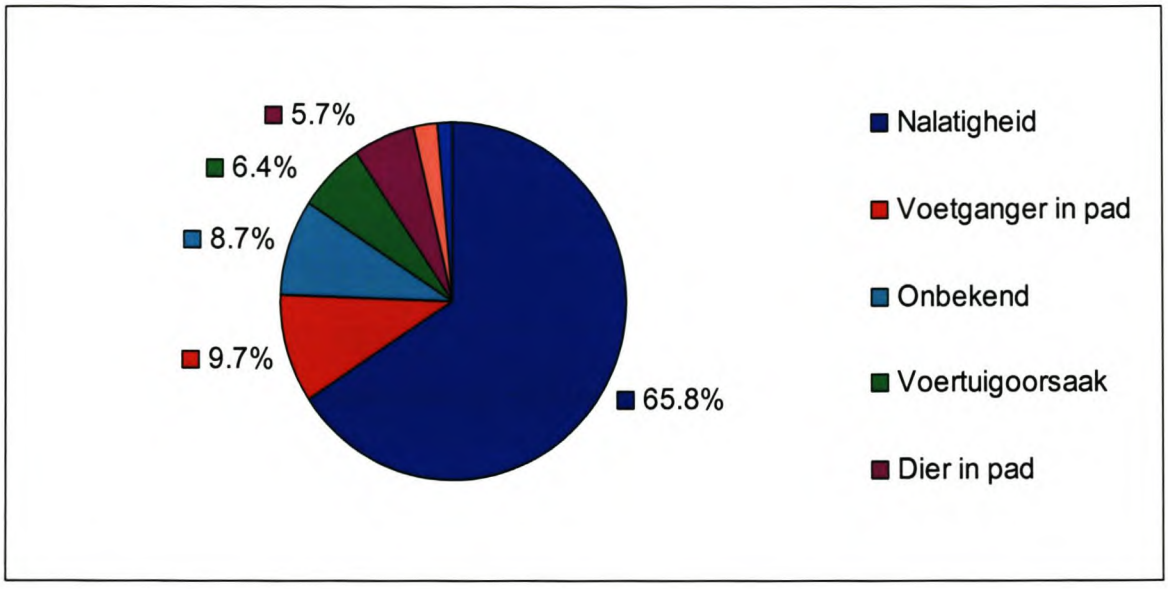
Dit is te verstane dat Botsing met voetganger- ongelukke die meeste sterftes veroorsaak het op die R44, aangesien 'n voetganger geen beskerming (in vergelyking met 'n motoris in 'n voertuig) teen 'n voertuig kan bied nie. Die ongelukstipe Teenoorgestelde rigting tromp-op het die tweede meeste sterftes veroorsaak. Dit is 'n ongelukstipe wat baie gereeld lei tot sterftes op ander paaie landwyd.

4.2 Moontlike oorsaak en skuldige party

In tabel 4.2.1 en figuur 4.2.1 word die ongelukke volgens oorsaak geklassifiseer, soos dit in hierdie studie bepaal is. In figuur 4.2.1 word slegs die oorsake van ongelukke wat meer as 5% van die totale oorsake beslaan met 'n byskrif aangedui.

Tabel 4.2.1 Oorsake van ongelukke

Oorsaak	Aantal	%
Nalatigheid	266	65.8
Voetganger in pad	39	9.7
Onbekend	35	8.7
Voertuigoorsaak	26	6.4
Dier in pad	23	5.7
Alkoholgebruik vermoed	9	2.2
Slegte padoppervlakte	6	1.5
	404	



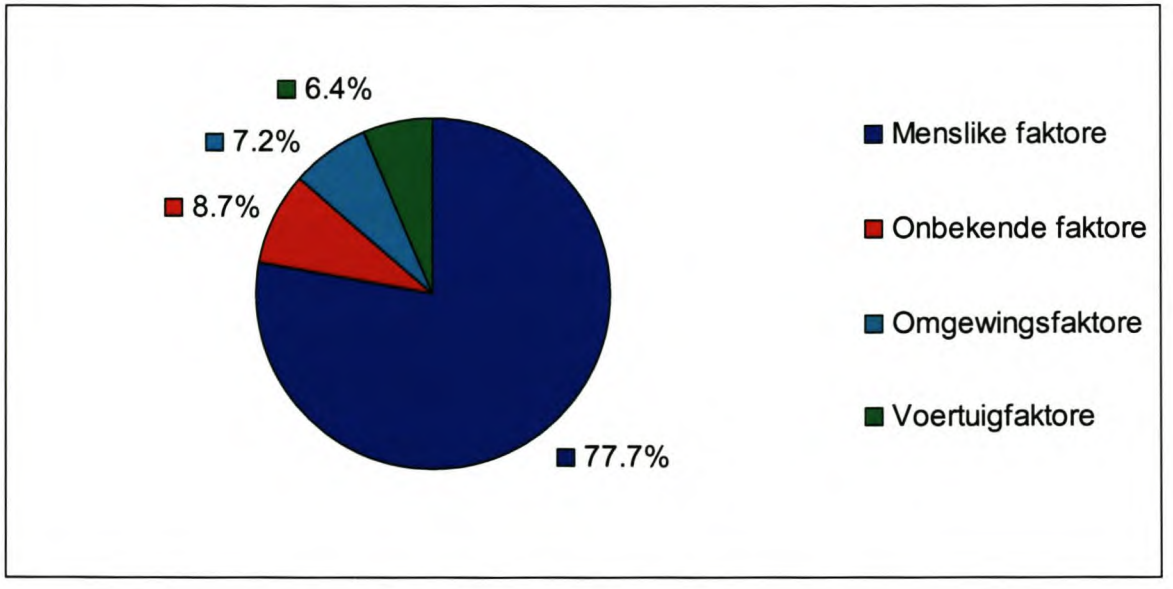
Figuur 4.2.1 Oorsake van ongelukke

Die grootste oorsaak (ongeveer twee derdes) van die ongelukke in hierdie studie was nalatigheid. Voetgangers in die pad veroorsaak ongeveer 10% van die ongelukke, terwyl 8.7% van die ongelukke onbekende oorsake het.

Daar was nege bestuurders sonder lisensies, waarvan agt uit die nege die betrokke ongeluk veroorsaak het.

Daar was ses bestuurders van ander lande wat ongelukke veroorsaak het. Die ses bestuurders sluit in drie van Duitsland, een van Engeland, een van Amerika, en een van Zimbabwe. Bestuurders van ander lande wat ongelukke veroorsaak blyk nie 'n probleem op die R44 te wees nie.

In figuur 4.2.2 kan die hoof faktore wat bydra tot ongelukke in hierdie studie, gesien word. In hierdie studie is die oorvleueling van faktore nie in berekening gebring nie. Daar is bevind in hierdie studie op die R44 dat die menslike faktor die grootste oorsaak van ongelukke is. Hierdie resultaat stem ooreen met die literatuur (Austroads, 1994) (Treat, JR. Et al. 1979) (Departement van Vervoer, 2004). Die resultaat dat voertuigfaktore die minste ongelukke veroorsaak, stem ook ooreen met Austroads (1994) en die "Tri-level Study" (Treat, JR. Et al. 1979). Austroads (1994) en Treat, JR et al (1979) bevind egter dat omgewingsfaktore 'n veel groter rol speel om ongelukke te veroorsaak as wat bevind is in hierdie studie. Dit kan te wyte wees dat die ligging van ongelukke nie nagegaan kon word nie, weens die bedenklike datakwaliteit soos wat in hoofstuk 4.3 bespreek word. Volgens die Departement van Vervoer (2004) dra voertuigfaktore meer by tot ongelukke as omgewingsfaktore. Daar moet egter in ag geneem word dat die Departement van Vervoer se data landwyd versamel word, en hierdie studie slegs op twee seksies van een pad gedoen is. Om hierdie rede sal die resultate effens verskil.

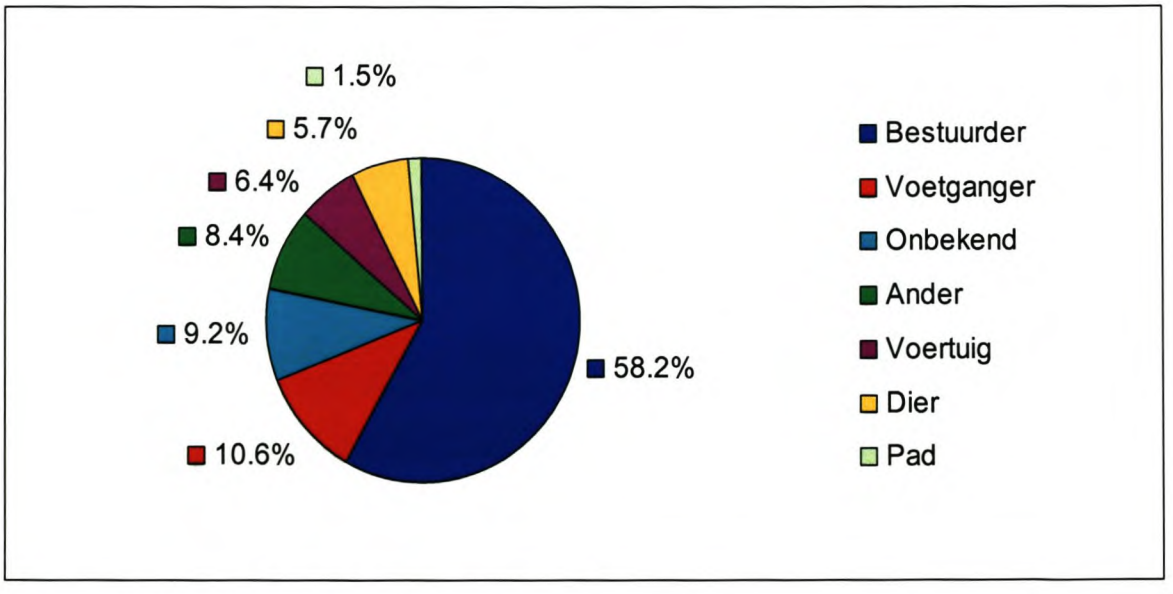


Figuur 4.2.2 Faktore in hierdie studie wat bydra tot ongelukke

Vanaf tabel 4.2.2 en figuur 4.2.2 kan die skuldige partye in die 404 ongelukke gesien word soos in hierdie studie bevind is.

Tabel 4.2.2 Skuldige partye in ongelukke

Skuldige party	Aantal	%
Bestuurder	235	58.2
Voetganger	43	10.6
Onbekend	37	9.2
Ander	34	8.4
Voertuig	26	6.4
Dier	23	5.7
Pad	6	1.5
	404	



Figuur 4.2.3 Skuldige partye in ongelukke

Uit figuur 4.2.3 kan afgelei word dat die bestuurder vir ongeveer 59% van die ongelukke verantwoordelik was, voetgangers vir 10.6% en daar 'n onbekende skuldige party was vir 9.2% van die ongelukke.

Daar kan opgelet word dat figuur 4.2.3 sterk ooreenkomste het met figuur 4.2.1, maar tog nie heeltemal dieselfde is nie. Dit kan verduidelik word deurdat byvoorbeeld nalatigheid nie net deur die bestuurder uitgeoefen kan word nie, maar ook deur 'n voetganger of 'n ander onbekende bestuurder.

4.3 Datakwaliteit

Volgens O'Day (1993) bevat ongeluksdata die volgende komponente van kwaliteit:

- Volledigheid van dekking – die mate waartoe die datasisteem al die ongelukke bevat soos deur wetgewing vereis word.
- Konsekwentheid van dekking – of die mate van rapportering geografies, met tyd, met die weer of met ander faktore varieer.
- Vermiste data – die hoeveelheid vermiste data-elemente.
- Konsekwentheid van interpretasie – of die data-elemente dieselfde deur verskillende beamptes en in verskillende areas gerapporteer word, byvoorbeeld graad van besering.
- Korrekte data – of die korrekte data versamel word wat vir verskillende doelstellings benodig word. In Suid Afrika sal die Nasionale Padagentskap byvoorbeeld meer in paddata belangstel, terwyl die Automobiel Assosiasie meer voertuigdata sal vereis.
- Relevante detailvlak – sommige veranderlikes word in meer detail as ander vereis.
- Korrekte dataversamelprosedure ("capture") – of die data korrek vanaf die ongeluksvorm na die rekenaar datasisteem oorgedra word.
- Responsfout – indien 'n veranderlike gemeet was, was dit korrek gemeet?

Die ongeluksdata wat geanaliseer is met betrekking tot die R44 het leemtes in die afdelings konsekwentheid van dekking, vermiste data, konsekwentheid van interpretasie, korrekte dataversamelprosedure en responsfout gehad.

4.3.1 Konsekwentheid van dekking

Ongelukke wat snags plaasgevind het waarin slegs een voertuig betrokke was, se ongeluksvorms is oor die algemeen swakker ingevul as ongeluksvorms van ongelukke wat bedags gebeur het. Dit het 'n probleem met die konsekwentheid van dekking veroorsaak.

4.3.2 Vermiste data

In die twee veranderlikes geslag en ouderdom was daar baie vermiste data. Uit die totale ongelukke (404) was 45% van geslagdata en 51% van ouderdomdata nie ingevul nie. Die afwesigheid van die geslag- en ouderdomdata in hierdie studie het moontlike verwantskappe met daardie veranderlikes verhoed wat die resultate van die studie beperk het. Daar was ander veranderlikes wat ook nie volledig ingevul was nie, maar hulle was nie so beduidend soos die geslag- en ouderdomveranderlikes nie.

4.3.3 Konsekwentheid van interpretasie

Die veranderlike wat die padoppervlakte se toestand aandui (hoofstuk 64 "OAR"/"AR"), is 107 keer uit die totale 404 ongelukke gemerk as ys wat op die pad voorgekom het. In drie ongelukke was "sneeu op die pad" gemerk. Vanaf die gewone weerpatrone op die R44 is ys en sneeu op die pad 'n onwaarskynlike verskynsel. Hierdie veranderlike wat die padoppervlakte se toestand aandui se vlakke kan ook as nat of droog gemerk word, wat amper altyd voldoende sal wees, maar in 42 ongelukke is die vlak "other" gemerk. Met hierdie veranderlike is daar 'n groot konsekwentheid van interpretasie-probleem. Is dit hoegenaamd die moeite werd om die ongeluksvorms se data te gebruik indien die veranderlikes so foutief is?

Weens die foutiewe veranderlike wat die padoppervlakte se toestand aandui, kon daar nie verwantskappe getref word daarmee nie. Dit het die resultate van die studie beperk, ten spyte van die feit dat daar baie relevante literatuur beskikbaar is.

Die foutiewe klassifisering van ongelukstipes, wat die konsekwentheid van interpretasie beïnvloed, word in hoofstuk 3.1.1.1 bespreek.

4.3.4 Korrekte data versamel prosedure

Daar is vier sterftes in vier ongelukke op die ongeluksvorms opgemerk, wat nie op die sisteem verskyn het nie (acc no 7373, 8780, 8836, 8417). Die dataversamelprosedure was dus foutief in hierdie verband. Drie van die vier sterftes was ongelukke met voetgangers.

Alhoewel die weglating van vier sterftes uit 404 ongelukke nie baie is nie, is die "onder-rapportering" van ongelukke wel wêreldwyd 'n probleem. Elvik & Mysen (1999) het in 'n studie van 13 lande bevind dat sterftes in ongeveer 95% van gevalle gerapporteer word. Verder is bevind dat ernstige beserings in 70% van ongelukke en ligte beserings in 25% van ongelukke gerapporteer word. Hauer & Hakkert (1988) skat dat sterftes tot 'n akkuraatheid van ongeveer 5% van die totale sterftes bekend is. In hierdie studie is ernstige en ligte beserings nie nagegaan nie.

Die probleem met "onder-rapportering" van ongelukke (en sterftes) is natuurlik dat die werklike situasie nie weerspieël word nie. Die resultaat daarvan is dat daar nie vir oplossings vir die probleem gesoek word nie, omdat die probleem nie so groot lyk nie. Die weglating van die vier sterftes op die R44 volg daaruit dat die inligting nie korrek vanaf die ongeluksvorm na die databasis oorgedra is nie. Daar moet daarvolgens gepoog word om nie sulke weglatingsfoute te maak nie.

4.3.5 Responsfout

Die problematiese invul van die ligging van die ongelukke op die R44 word hier onder in nommer 1-7 bepreek. Die foutiewe bepaling van 'n kilometerlesing verwys na 'n responsfout. No 1, 2, 3 en 4 is baie algemene probleme, al is slegs een voorbeeld van elke probleem gegee.

1. Die kilometerlesing van 'n plaas of toegangspad op die ongeluksvorms en die kilometerlesing van 'n plaas of toegangspad volgens Provinsiale Administrasie Wes-Kaap (2003) stem meestal nie ooreen nie. Daar is gewoonlik 'n verskil van ongeveer 1km tussen die kilometerlesing op die ongeluksvorm en die werklike kilometerlesing van die plaas of toegangspad. 'n Voorbeeld hiervan is dat op die databasis staan daar dat die ongeluk by 48.4km plaasgevind het, maar van die ander inligting op die ongeluksvorm blyk dit dat die ongeluk by Wiesenhof gebeur het, wat volgens Provinsiale Administrasie Wes-Kaap (2003) by 47.6km is (acc no 839).

2. Die naam van die toegangspad word verkeerd vanaf die ongeluksvorm na die databasis oorgedra. Daar staan byvoorbeeld op die databasis dat die ongeluk by die aansluiting DR01053xMR00027 (Stellenrust RD) gebeur het, maar op die ongeluksvorm staan daar dat die ongeluk by die aansluiting DR01050xMR00027 (Anandale RD) plaasgevind (acc no 86). Hierdie twee aansluitings is volgens Provinsiale Administrasie Wes-Kaap (2003) 560m uitmekaar.

3. Dit was glad nie duidelik in hierdie studie of ongelukke by die Klapmuts kruising (MR00027xMR00189) of by die op-/afrit van die N1 (MR00027xNR00101) plaasgevind het nie, as een van hierdie plekke op die ongeluksvorm aangedui is nie (acc no 5142). Op die ongeluksvorms het hierdie plekke óf dieselfde km-lesing (km 51.8), óf 'n foutiewe kilometerlesing óf 'n verkeerde aansluitingnaam. Slegs van die

ongeluksvorm se woordelikse beskrywing word die ligging van die ongeluk duideliker.

4. 'n Verskeidenheid beskrywings word vir die Jamestown kruising op die ongeluksvoms gegee, soos byvoorbeeld 0.1km (acc no 6969), 0.3km (acc no 6894), 1.15km (acc no 7869), 1.6km (acc no 7426), 3.7km (acc no 6857) en DR1053xMR00027(acc no 9066), terwyl dit volgens Provinsiale Administrasie Wes-Kaap (2003) by 29.6km is en aansluiting MR00027xMR1056 is.

5. Vir een ongeluk word die ligging daarvan op die databasis as die kruising MR00027xMR00189 gegee, maar vanaf die ongeluksvorm blyk die ongeluk drie kilometer daarvandaan (nie by 'n kruising of die spesifieke kruising) plaasgevind het (acc no 3241).

6. Party van die beskrywings van die ligging van die ongelukke is baie vaag op die databasis, een voorbeeld daarvan is "Intersection with Klippen plaas" (acc no 1182). Daar is ook soms nie meer inligting op die ongeluksvorm wat die ligging van die ongeluk duidelik maak nie.

7. Op sommige ongeluksvorms is daar geen verifiëring van die kilometerlesing wat vanaf die databasis verkry is nie (acc no 8588). Dit is dus nie duidelik waarvandaan daardie kilometerlesing kom nie, en of dit reg is nie.

Die implikasies van die akkuraatheid van die invul van die ligging van die ongelukke op die R44 word vervolgens bespreek.

1. Volgens Provinsiale Administrasie Wes-Kaap (2003) is die kilometerlesings van die studie-gedeelte van die R44 21.37km tot 31.72km, en 36.2km tot 51.15km. Weens die foutiewe kilometerlesings van die ongelukke kan daar nie met absolute sekerheid gesê word dat die ongelukke wat geanaliseer is

wel in die studie-gedeelte geval het nie, en of daar ongelukke uitgelaat is nie. Die aantal ongelukke wat in die studietydperk op die studie-gedeelte gebeur het, kan meer óf minder wees as die aantal ongelukke wat in hierdie studie bespreek word.

2. 'n Terreinondersoek by die kilometerlesings verskaf van die databasis sal nutteloos wees, aangesien die werklike plek van ongeluk nie besoek sal word nie. Slegs van die ongeluksvorm se woordelikse beskrywing (indien dit ingevul is) sal die ligging van die ongeluk duidelik wees.

3. Aansluitings kan gevaarliker óf veiliger voorkom as wat hulle regtig is, omdat die aansluitingname verkeerd in die databasis ingevoer word. Dit kan dus voorkom of daar baie meer of baie minder ongelukke by 'n aansluiting voorkom as wat werklik die geval is.

4. Party kilometerlesings stel in werklikheid kruisings voor, en sommige ongelukke wat volgens die databasis by kruisings plaasvind, vind slegs in die omgewing van die kruising plaas.

5. As slegs 'n plaasnaam op die databasis verskyn, moet die vorm onttrek word vir moontlike meer inligting, of die plaasnaam moet van Provinsiale Administrasie Wes-Kaap (2003) gesoek word. Dit is 'n tydsame proses.

6. Indien daar geen verifiëring van die kilometerlesings op die databasis op die ongeluksvorms is nie, is die ligging baie onseker.

Weens die probleme wat in nommer 2, 4 en 6 hierbo genoem word, is die bestudering van spesifieke gevaarlike gedeeltes ("hazardous locations") van die R44 by hierdie studie uitgesluit.

4.3.6 Ander foute

Ander foute wat voorgekom het tydens die analise van die ongeluksvorms was die volgende:

- Twee voertuie se registrasieplate is as motorfabrikate ingevul, naamlik Renault en Toyota.
- In ses gevalle is die geslag van die persoon as "3" op die databasis aangedui, wat nie as 'n opsie voorkom nie.
- Een persoon se ID nommer bevat letters.
- Een bestuurder se ouderdom is een jaar.

Die veranderlike wat die kompasrigting van 'n reis (afdeling 37 "OAR"/"AR") aandui, se betroubaarheid is as bedenklik beskou en is dus uitgeskakel by hierdie studie.

Die bogenoemde foute het die gevolg gehad dat die betroubaarheid van die databasis betwyfel is.

4.3.7 Bydraende faktore tot datakwaliteit

Die moontlike faktore wat die algemene bedenklike datakwaliteit van die ongeluksvorms veroorsaak, is dat die ongeluksvorms te lank neem om in te vul weens die lengte van die vorm (vier A4 blaaie), en dat sekere veranderlikes nie reg verstaan word deur die persone wat die ongeluksvorms invul nie. Die betrokke persone het moontlik ook nie genoeg tyd om die ongeluksvorms in te vul nie, en is ook nie bewus van die belangrikheid van kwaliteit-ongeluksdata nie. Die betroubaarheid van die databasis het ook te doen met die persone wat die inligting vanaf die ongeluksvorms in die databasis invoer. Aanbevelings om die datakwaliteit te verbeter word in hoofstuk 6.1 weergegee.

4.4 Verwantskappe verkry deur assosiasie-analise

In hierdie seksie word die 237 verwantskappe tussen die vlakke van veranderlikes wat deur die assosiasie-analise uitgelig is, weergegee. In tabelle 4.4.1, 4.4.2 en 4.4.3 verskyn slegs die geverifieerde 237 verwantskappe vir die drie ongeluksgroepe. Die proses om hierdie geverifieerde verwantskappe te verkry is in hoofstuk 3.2 beskryf. Hierdie is dus die verwantskappe wat as resultaat uit die tesis spruit tussen die vlakke van die veranderlikes.

Die kursief gedrukte woorde dui die veranderlikes aan. Daar kan gesien word hoeveel keer die verskillende vlakke van die veranderlikes saam voorgekom het. In tabelle 4.4.1, 4.4.2 en 4.4.3 kom die terme in Engels voor soos dit in CBA (2001) en Statistica (2003) gebruik is. Die vertaalde Afrikaanse terme daarvoor kan onder die "Lys van simbole, vreemde woorde en spesiale terminologie" elders besigtig word.

Ná tablle 4.4.1, 4.4.2 en 4.4.3 volg 'n voorbeeld van hoe die verwantskappe wat tussen die veranderlikes gevind is toegepas is vir gebruik in die bepaling van risikofaktore per ongelukstipe.

Tabel 4.4.1 Verwantskappe: Totale voertuigbotsings

Vlak 1	Vlak 2	Vlak 1 #	Vlak 1 %	Vlak 2 #	Vlak 2 %
"Hour"	*"Accident type"*				
"Hour"=8	"Head/Rear end"	20	5	10	50
"Accident type"	*"Light"*				
"Head/Rear end"	"Daylight"	103	25.5	88	85.4
"Sideswipe: same direction"	"Daylight"	56	13.9	50	89.3
"Accident with animal"	"Night-unlit"	18	4.5	10	55.6
"Accident type"	*"Vehicle type"*				
"Sideswipe: same direction"	"Motorcar/station wagon"	56	13.9	35	62.5
"Accident with pedestrian"	"Motorcar/station wagon"	42	10.4	29	69
"Accident with fixed object"	"Motorcar/station wagon"	40	9.9	25	62.5
"Other: Vehicle left road"	"Motorcar/station wagon"	21	5.2	14	66.7
"Accident type"/ "Cause"					
"Head/Rear end"	"Negligence"	104	25.7	92	88.5
"Sideswipe: same direction"	"Negligence"	56	13.9	50	89.3
"Accident with pedestrian"	"P in road"	42	10.4	32	76.2

"P in road"	"Accident with pedestrian"	39	9.7	32	82.1
"Sideswipe: opposite directions"	Negligence	35	8.7	29	82.9
"Animal in road"	"Accident with animal"	23	5.7	18	78.3
"Approach at angle-both travelling straight"	"Negligence"	21	5.2	15	71.4
"Accident with animal"	"Animal in road"	18	4.5	18	100
"Accident type"/ "Person at fault"					
"Head/Rear end"	"Driver"	104	25.7	84	80.8
"Sideswipe: same direction"	"Driver"	56	13.9	45	80.4
"Pedestrian"	"Accident with pedestrian"	43	10.6	35	81.4
"Accident with pedestrian"	"Pedestrian"	42	10.4	35	83.3
"Sideswipe: opposite directions"	"Driver"	35	8.7	24	68.6
"Animal"	"Accident with animal"	23	5.7	17	73.9
"Approach at angle-both travelling straight"	"Driver"	21	5.2	13	61.9
"Accident with animal"	"Animal"	18	4.5	18	100
"Accident type"	*"Gender"*				
"Sideswipe: opposite directions"	"Male"	35	8.7	19	54.3
"Cause"/ "Person at fault"					
"Negligence"	"Driver"	266	65.8	229	86.1
"Driver"	"Negligence"	235	58.2	229	97.4
"Pedestrian"	"P in road"	43	10.6	39	90.7
"P in road"	"Pedestrian"	39	9.7	39	100
"Unknown pfault"	"Unknown "Cause"	37	9.2	35	94.6
"Unknown cause"	"Unknown pfault"	35	8.7	35	100
"Other"	"Negligence"	34	8.4	34	100
"Vehicle"	"Vehicle problem"	26	6.4	26	100
Vehicle problem"	"Vehicle"	26	6.4	26	100
"Animal"	"Animal in road"	23	5.7	23	100
"Animal in road"	"Animal"	23	5.7	23	100
"Cause"/ "Weekday"					
"Friday"	"Negligence"	74	18.3	55	74.3
"Thursday"	"Negligence"	65	16.1	47	72.3
"Monday"	"Negligence"	50	12.4	34	68
"Wednesday"	"Negligence"	49	12.1	35	71.4
"Tuesday"	"Negligence"	41	10.1	28	68.3
"Cause"/ "Hour"					
"Hour"=13	"Negligence"	33	8.2	24	72.7
"Hour"=15	"Negligence"	28	6.9	20	71.4
"Hour"=7	"Negligence"	24	5.9	20	83.3
"Hour"=16	"Negligence"	21	5.2	18	85.7
"Hour"=8	"Negligence"	20	5	15	75
"Hour"=14	"Negligence"	20	5	14	70
"Hour"=9	"Negligence"	18	4.5	14	77.8
"Cause"/ "Light"					
"Daylight"	"Negligence"	270	66.8	196	72.6
"Negligence"	"Daylight"	266	65.8	196	73.7
"Animal in road"	"Night-unlit"	23	5.7	12	52.2
"Cause"/ Vehicle type"	"				
"Light Delivery Vehicle"	"Negligence"	90	22.3	61	67.8
"P in road"	"Motorcar/station wagon"	39	9.7	29	74.4
"Cause"/ "Gender"					
"Male"	"Negligence"	173	42.8	157	90.8

"Negligence"	"Male"	266	65.8	157	59
"Cause"/ Age					
"Age=31-40	"Negligence"	49	12.1	46	93.9
"Age=41-50	"Negligence"	34	8.4	33	97.1
"Age=51-60	"Negligence"	26	6.4	25	96.2
"Weekday	*"Person at fault"*				
"Friday	"Driver"	74	18.3	52	70.3
"Thursday	"Driver"	65	16.1	43	66.2
"Wednesday	"Driver"	49	12.1	31	63.3
"Person at fault"/ "Hour"					
"Hour"=17	"Driver"	41	10.1	25	61
"Hour"=13	"Driver"	33	8.2	22	66.7
"Hour"=15	"Driver"	28	6.9	18	64.3
"Hour"=7	"Driver"	24	5.9	17	70.8
"Hour"=8	"Driver"	20	5	14	70
"Hour"=9	"Driver"	18	4.5	13	72.2
"Person at fault"/ "Light"					
"Daylight"	"Driver"	270	66.8	171	63.3
"Driver"	"Daylight"	235	58.2	171	72.8
"Other"	"Daylight"	34	8.4	25	73.5
"Person at fault"/ "Gender"					
"Driver"	"Male"	235	58.2	160	68.1
"Male"	"Driver"	173	42.8	160	92.5
"Person at fault"/ "Age"					
"Age"=21-30	"Driver"	56	13.9	53	94.6
"Age"=31-40	"Driver"	49	12.1	47	95.9
"Age"=41-50	"Driver"	34	8.4	33	97.1
"Weekday"	*"Light"*				
"Monday"	"Daylight"	50	12.4	37	74
"Wednesday"	"Daylight"	49	12.1	34	69.4
"Tuesday"	"Daylight"	41	10.1	32	78
"Weekday"	*"Vehicle type"*				
"Friday"	"Motorcar/station wagon"	74	18.3	48	64.9
"Sunday"	"Motorcar/station wagon"	54	13.4	36	66.7
"Weekday"	*"Gender"*				
"Friday"	"Male"	74	18.3	40	54.1
"Hour"	*"Vehicle type"*				
"Hour"=17	"Motorcar/station wagon"	41	10.1	28	68.3
"Hour"=13	"Motorcar/station wagon"	33	8.2	21	63.6
"Hour"=18	"Motorcar/station wagon"	24	5.9	16	66.7
"Hour"=14	"Motorcar/station wagon"	20	5	13	65
"Hour"=19	"Motorcar/station wagon"	16	4	13	81.3
"Light" / "Gender"					
"Female"	"Daylight"	49	12.1	43	87.8
"Light"/ "Age"					
"Age"=41-50	"Daylight"	34	8.4	27	79.4

Tabel 4.4.2 Verwantskappe: Enkelvoertuigbotsings

Vlak 1	Vlak 2	Vlak 1 #	Vlak 1 %	Vlak 2 #	Vlak 2 %
"Hour"	*"Accident type"*				
"Hour"=13	"Single vehicle overturned"	12	7.5	6	50
"Hour"=15	"Accident with pedestrian"	10	6.3	5	50
"Hour"=18	"Accident with pedestrian"	12	7.5	6	50
"Accident type"	*"Light"*				
"Accident with pedestrian"	"Daylight"	42	26.3	28	66.7
"Accident with animal"	"Night-unlit"	18	11.3	10	55.6
"Accident type"/ "Vehicle type"					
"Accident with pedestrian"	"Motorcar/station wagon"	42	26.3	29	69
"Other: Vehicle left road"	"Motorcar/station wagon"	21	13.1	14	66.7
GVM>3500kg	"Single vehicle overturned"	10	6.3	5	50
"Accident type"/ "Cause"					
"Accident with pedestrian"	"P in road"	42	26.3	32	76.2
"Accident with fixed object"	"Negligence"	40	25	25	62.5
"P in road"	"Accident with pedestrian"	38	23.8	32	84.2
"Animal in road"	"Accident with animal"	23	14.4	18	78.3
"Vehicle problem"	"Single vehicle overturned"	19	11.9	11	57.9
"Accident with animal"	"Animal in road"	18	11.3	18	100
"Unknown"	"Single vehicle overturned"	14	8.8	7	50
"Accident type"/ "Person at fault"					
"Accident with pedestrian"	"Pedestrian"	42	26.3	35	83.3
"Pedestrian"	"Accident with pedestrian"	41	25.6	35	85.4
"Animal"	"Accident with animal"	22	13.8	17	77.3
"Vehicle"	"Single Vehicle Overturned"	19	11.9	11	57.9
"Accident with animal"	"Animal"	18	11.3	18	100
"Unknown"	"Single Vehicle Overturned"	14	8.8	7	50
"Other"	"Accident with fixed object"	12	7.5	7	58.3
"Cause"/ "Person at fault"					
"Negligence"	"Driver"	58	36.3	45	77.6
"Driver"	"Negligence"	48	30	45	93.8
"Pedestrian"	"P in road"	41	25.6	38	92.7
"P in road"	"Pedestrian"	38	23.8	38	100
"Animal"	"Animal in road"	23	14.4	23	100
"Animal in road"	"Animal"	23	14.4	23	100
"Vehicle"	"Vehicle problem"	19	11.9	19	100
"Vehicle problem"	"Vehicle"	19	11.9	19	100
"Unknown pfault"	"Unknown cause"	14	8.8	14	100
"Unknown "Cause"	"Unknown pfault"	14	8.8	14	100
"Other"	"Negligence"	12	7.5	12	100
"Cause"/ "Weekday"					

"Wednesday"	"Negligence"	22	13.8	12	54.5
"Cause"	*"Light"*				
"Negligence"	"Daylight"	58	36.3	32	55.2
"P in road"	"Daylight"	38	23.8	22	57.9
"Animal in road"	"Night-unlit"	23	14.4	12	52.2
"Vehicle problem"	"Daylight"	19	11.9	11	57.9
"Unknown"	"Night-unlit"	14	8.8	7	50
"Cause"	*"Vehicle type"*				
"P in road"	"Motorcar/station wagon"	38	23.8	28	73.7
"Unknown"	"Motorcar/station wagon"	14	8.8	10	71.4
"Cause"	*"Gender"*				
"Negligence"	"Male"	58	36.3	34	58.6
"Male"	"Negligence"	48	30	34	70.8
"Cause"/ "Age"					
"Age"=21-30	"Negligence"	15	9.4	12	80
"Age"=31-40	"Negligence"	12	7.5	9	75
"Person at fault"/ "Weekday"					
"Wednesday"	"Driver"	22	13.8	11	50
"Hour"	*"Person at fault"*				
"Hour"=18	"Pedestrian"	12	7.5	6	50
"Person at fault"	*"Light"*				
"Pedestrian"	"Daylight"	41	25.6	24	58.5
"Animal"	"Night-unlit"	22	13.8	11	50
"Vehicle"	"Daylight"	19	11.9	11	57.9
Unknown	"Night-unlit"	14	8.8	7	50
Other	"Daylight"	12	7.5	8	66.7
"Person at fault"	*"Vehicle type"*				
"Pedestrian"	"Motorcar/station wagon"	41	25.6	31	75.6
Unknown	"Motorcar/station wagon"	14	8.8	10	71.4
"Person at fault"/ "Gender"					
"Male"	"Driver"	48	30	37	77.1
"Driver"	"Male"	48	30	37	77.1
"Person at fault"/ "Age"					
"Age"=21-30	"Driver"	15	9.4	12	80
"Age"=31-40	"Driver"	12	7.5	10	83.3
Weekday	*"Light"*				
Saturday	"Daylight"	29	18.1	16	55.2
Friday	"Night-unlit"	26	16.3	13	50
Thursday	"Night-unlit"	22	13.8	11	50
Wednesday	"Daylight"	22	13.8	12	54.5
Tuesday	"Daylight"	17	10.6	11	64.7
Monday	"Daylight"	14	8.8	10	71.4
Weekday	*"Vehicle type"*				
Sunday	"Motorcar/station wagon"	30	18.8	21	70
Friday	"Motorcar/station wagon"	26	16.3	20	76.9
Thursday	"Motorcar/station wagon"	22	13.8	16	72.7
"Age"	*Weekday*				
"Age"=31-40	Wednesday	12	7.5	6	50
"Hour"	*"Vehicle type"*				

"Hour"=13h	"Motorcar/station wagon"	12	7.5	8	66.7
"Hour"=18h	"Motorcar/station wagon"	12	7.5	9	75
"Hour"=21h	"Motorcar/station wagon"	11	6.9	8	72.7
"Light"/ "Gender"					
Female	"Daylight"	15	9.4	13	86.7
"Age"	*"Light"*				
"Age"=31-40	"Daylight"	12	7.5	9	75

Tabel 4.4.3 Verwantskappe: Veelvoertuigbotsings

Vlak 1	**Vlak 2**	**Vlak 1 #**	**Vlak 1 %**	**Vlak 2 #**	**Vlak 2 %**
"Accident type"/ Weekday					
Wday=Thursday	"Head/Rear end"	43	17.6	22	51.2
Wday=Wednesday	"Head/Rear end"	27	11.1	16	59.3
"Hour"	*"Accident type"*				
"Hour"=13	"Head/Rear end"	21	8.6	12	57.1
"Hour"=8	"Head/Rear end"	16	6.6	10	62.5
"Hour"=9	"Sideswipe: same direction"	12	4.9	8	66.7
"Hour"=11	"Head/Rear end"	12	4.9	7	58.3
"Hour"=18	"Head/Rear end"	12	4.9	6	50
"Hour"=10	"Head/Rear end"	12	4.9	6	50
"Accident type"	*"Light"*				
"Head/Rear end"	"Daylight"	104	42.6	88	84.6
"Sideswipe: same direction"	"Daylight"	56	23	50	89.3
"Accident type"	*"Vehicle type"*				
"Sideswipe: same direction"	"Motorcar/station wagon"	56	23	35	62.5
"Approach at angle-both travelling straight"	"Motorcar/station wagon"	21	8.6	13	61.9
"Turn right in face of oncoming traffic"	"Motorcar/station wagon"	11	4.5	7	63.6
"Light Delivery Vehicle"	"Head/Rear end"	58	23.8	32	55.2
"Accident type"	*"Cause"*				
"Head/Rear end"	"Negligence"	104	42.6	92	88.5
"Sideswipe: same direction"	"Negligence"	56	23	50	89.3
"Turn right in face of oncoming traffic"	"Negligence"	11	4.5	10	90.9
"Accident type"	*"Person at fault"*				
"Head/Rear end"	"Driver"	104	42.6	84	80.8
"Sideswipe: same direction"	"Driver"	56	23	45	80.4
"Turn right in face of oncoming traffic"	"Driver"	11	4.5	10	90.9
"Accident type"	"Gender"				
"Sideswipe: opposite directions"	"Male"	35	14.3	19	54.3
"Accident type"/ "Age"					
"Age"=21-30	"Head/Rear end"	41	16.8	21	51.2
"Cause"/ "Person at fault"					
"Negligence"	"Driver"	208	85.2	184	88.5
"Driver"	"Negligence"	187	76.6	184	98.4
"Unknown pfault"	"Unknown cause"	23	9.4	21	91.3
"Other"	"Negligence"	22	9	22	100
"Unknown cause"	"Unknown pfault"	21	8.6	21	100

"Cause"/ "Weekday"					
"Friday"	"Negligence"	48	19.7	45	93.8
"Tuesday"	"Negligence"	24	9.8	21	87.5
"Cause"/ "Time"					
"Hour"=13	"Negligence"	21	8.6	19	90.5
"Hour"=7	"Negligence"	19	7.8	18	94.7
"Hour"=15	"Negligence"	18	7.4	18	100
"Hour"=16	"Negligence"	17	7	15	88.2
"Hour"=14	"Negligence"	13	5.3	12	92.3
"Hour"=18	"Negligence"	12	4.9	11	91.7
"Hour"=10	"Negligence"	12	4.9	11	91.7
"Cause"/ "Light"					
"Negligence"	"Daylight"	208	85.2	164	78.8
"Daylight"	"Negligence"	190	77.9	164	86.3
"Night-unlit"	"Negligence"	29	11.9	26	89.7
"Cause"/ "Vehicle type"					
"Negligence"	"Motorcar/station wagon"	208	85.2	124	59.6
"Motorcar/station wagon"	"Negligence"	139	57	124	89.2
"Person at fault"/ "Weekday"					
"Friday"	"Driver"	48	19.7	45	93.8
"Thursday"	"Driver"	43	17.6	34	79.1
"Person at fault"/ "Hour"					
"Hour"=13	"Driver"	21	8.6	17	81
"Hour"=7	"Driver"	19	7.8	15	78.9
"Hour"=15	"Driver"	18	7.4	16	88.9
"Hour"=9	"Driver"	12	4.9	9	75
"Person at fault"/ "Light"					
"Daylight"	"Driver"	190	77.9	146	76.8
"Driver"	"Daylight"	187	76.6	146	78.1
"Dawn/dusk"	"Driver"	11	4.5	9	81.8
"Person at fault"/ "Vehicle type"					
"Driver"	"Motorcar/station wagon"	187	76.6	118	63.1
"Motorcar/station wagon"	"Driver"	139	57	114	82
"Weekday"/ "Light"					
"Friday"	"Daylight"	48	19.7	39	81.3
"Wednesday"	"Daylight"	27	11.1	22	81.5
"Tuesday"	"Daylight"	24	9.8	21	87.5
"Night-lit by streetlights"	"Friday"	10	4.1	5	50
"Weekday"	*"Vehicle type"*				
"Friday"	"Motorcar/station wagon"	48	19.7	28	58.3
"Saturday"	"Motorcar/station wagon"	42	17.2	25	59.5
"Monday"	"Motorcar/station wagon"	36	14.8	23	63.9
"Sunday"	"Motorcar/station wagon"	24	9.8	15	62.5
"Weekday"	*"Gender"*				
"Friday"	"Male"	48	19.7	32	66.7
"Sunday"	"Male"	24	9.8	13	54.2
"Hour"	*"Vehicle type"*				
"Hour"=17	"Motorcar/station wagon"	32	13.1	21	65.6
"Hour"=13	"Motorcar/station	21	8.6	13	61.9

	wagon"				
"Hour"=7	"Motorcar/station wagon"	19	7.8	11	57.9
"Hour"=12	"Motorcar/station wagon"	18	7.4	11	61.1
"Hour"=8	"Light Delivery Vehicle"	16	6.6	8	50
"Hour"=14	"Motorcar/station wagon"	13	5.3	8	61.5
"Hour"	*"Gender"*				
"Hour"=13	"Male"	21	8.6	13	61.9
"Hour"=18	"Male"	12	4.9	6	50
"Light" / "Gender"					
"Female"	"Daylight"	34	13.9	30	88.2
"Night-unlit"	"Male"	29	11.9	17	58.6
"Light"/ "Age"					
"Age"=21-30	"Daylight"	41	16.8	33	80.5
"Age"=41-50	"Daylight"	26	10.7	21	80.8
"Age"=>60	"Daylight"	13	5.3	11	84.6

4.4.1 Voorbeeld van gebruik van verwantskappe

As voorbeeld van hoe om die verwantskappe tussen die vlakke van die veranderlikes vir die bepaling van risikofaktore te gebruik word die ongelukstipe "Head/Rear end" gebruik. Tabelle 4.4.4 en 4.4.5 is 'n opsomming van tabelle 4.4.1 en 4.4.3 ten opsigte van die verwantskappe met betrekking tot die ongelukstipe "Head/Rear end".

Tabel 4.4.4 Verwantskappe uit totale botsings vir "Head/Rear end"-ongelukke

Vlak 1	**Vlak 2**	**Vlak 1 #**	**Vlak 1 %**	**Vlak 2 #**	**Vlak 2 %**
"Hour"	*"Accident type"*				
"Hour"=8	"Head/Rear end"	20	5	10	50
"Accident type"	"Light"				
"Head/Rear end"	"Daylight"	103	25.5	88	85.4
"Accident type"/ "Cause"					
"Head/Rear end"	"Negligence"	104	25.7	92	88.5
"Accident type"/ "Person at fault"					
"Head/Rear end"	"Driver"	104	25.7	84	80.8

In tabel 4.4.4 kan gesien word dat "Head/Rear end" verwantskappe het met die vlakke "Hour=8", "Daylight", "Negligence" en "Driver".

Tabel 4.4.5 Verwantskappe uit veelvoertuigbotsings vir "Head/Rear end"-ongelukke

Vlak 1	Vlak 2	Vlak 1 #	Vlak 1 %	Vlak 2 #	Vlak 2 %
"Accident type"/ Weekday					
Wday=Thursday	"Head/Rear end"	43	17.6	22	51.2
Wday=Wednesday	"Head/Rear end"	27	11.1	16	59.3
"Hour"	"Accident type"				
"Hour"=13	"Head/Rear end"	21	8.6	12	57.1
"Hour"=8	"Head/Rear end"	16	6.6	10	62.5
"Hour"=11	"Head/Rear end"	12	4.9	7	58.3
"Hour"=18	"Head/Rear end"	12	4.9	6	50
"Hour"=10	"Head/Rear end"	12	4.9	6	50
"Accident type"	"Light"				
"Head/Rear end"	"Daylight"	104	42.6	88	84.6
"Accident type"	"Vehicle type"				
"Light Delivery Vehicle"	"Head/Rear end"	58	23.8	32	55.2
"Accident type"	"Cause"				
"Head/Rear end"	"Negligence"	104	42.6	92	88.5
"Accident type"	"Person at fault"				
"Head/Rear end"	"Driver"	104	42.6	84	80.8
"Accident type"/ "Age"					
"Age"=21-30	"Head/Rear end"	41	16.8	21	51.2

In tabel 4.4.4 kan gesien word dat "Head/Rear end" verwantskappe het met die vlakke "Wday=Thursday', "Wday=Wednesday", "Hour=13", "Hour=8", "Hour=11", "Hour=18", "Hour=10", "Daylight", "Light Delivery Vehicle", "Negligence", "Driver" en "Age=21-30".

Dit is voor die hand liggend dat al die verwantskappe wat vir elke ongelukstipe gevind is, nie van belang sal wees nie. Die verwantskap van "Head/Rear end" en "Driver" hoef byvoorbeeld nie noodwendig in die risikofaktore opgeneem word nie, want die vlak "Negligence" impliseer tog die bestuurder, tensy 'n voetganger ook ter sprake is. Verder is die ure wat ongelukke plaasgevind het wat verwantskappe met "Head/Rear end" toon, naamlik 13h00, 8h00, 11h00, 18h00 en 10h00 saamgevat in die risikofaktor "Spitstye". Die ure 8h00, 13h00 en 18h00 is oor die algemeen deel van die oggend-, middag- en aandspitstye. Indien die datagroep groter was, of as slegs een spesifieke uur voorgekom het, sou daar meer klem kon gelê word op spesifieke ure. Daar is laastens besluit dat die

verwantskappe wat met ouderdomsgroepe (byvoorbeeld “Age=21-30”) weg te laat, weens die groot aantal vermiste data. Alhoewel hierdie verwantskappe geverifieer is, het die groot aantal vermiste data soos in hoofstuk 4.3 bespreek word tog die vertroue in hierdie verwantskappe geskend.

5. GEVOLGTREKKINGS

5.1 Ongelukstipes - risikofaktore

Die risikofaktore vir die verskillende ongelukstipes volg. Die risikofaktore is afgelei deur:

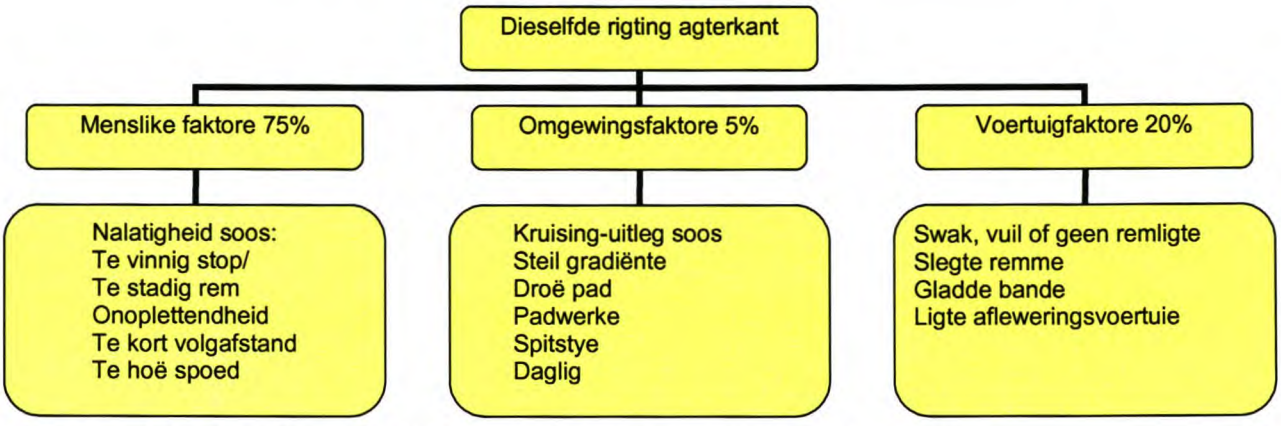
- die kennis opgedoen deur die analise van die ongeluksvorms,
- die verwantskappe wat bepaal is,
- en die literatuur wat bestudeer is.

Die geverifieerde verwantskappe vir die ongelukstipes wat hier van toepassing is, is tussen die veranderlike ongelukstipe en die volgende veranderlikes: uur van ongeluk, voertuigtipe, oorsaak van ongeluk, skuldige party en geslag van skuldige party. Die geverifieerde verwantskappe volg uit hoofstuk 4.4. Die verwantskappe wat deur die assosiasie-analise bepaal is vir elke ongelukstipe word na die betrokke figuur van die risikofaktore vir elke ongelukstipe gegee. Ander verwantskappe wat nie hier van toepassing is nie, word in hoofstuk 5.3 weergegee.

Die persentasies vir die menslike-, omgewings-, en voertuigfaktore is geskat en behoort slegs as 'n verwysingspunt gebruik te word. Elke ongeluk wat gebeur se risikofaktore sal uniek wees. Hierdie risikofaktore is bepaal met verwysing na die R44 en die literatuur wat bestudeer is.

Waar daar byvoorbeeld "Ligte afleweringsvoertuie" of "motorvoertuie" onder voertuigfaktore staan, verwys dit na 'n tipe voertuig wat 'n verwantskap het (en dus 'n risiko) met die betrokke ongelukstipe. Die risikofaktor "Te hoë spoed" kom onder verskeie ongelukstipes se menslike faktore voor sonder dat dit gestaaf word, omdat dit 'n algemeen bekende risikofaktor is.

5.1.1 Dieselfde rigting agterkant-ongelukke



Figuur 5.1.1 Risikofaktore vir Dieselfde rigting agterkant-ongelukke

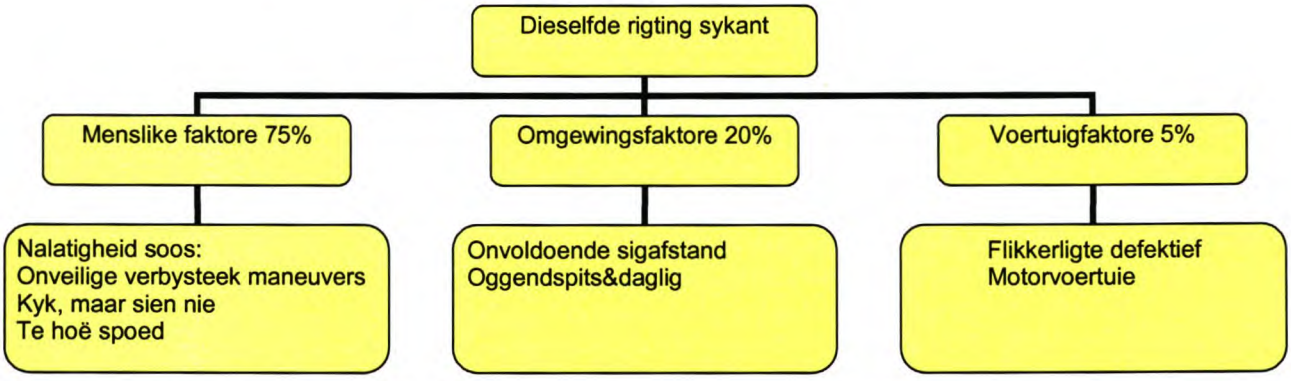
Hierdie ongelukstipe het verwantskappe met die volgende vlakke van veranderlikes gehad: nalatigheid, spitstye, daglig en ligte afleweringsvoertuie.

Volgens die Departement van Vervoer (2004) word Dieselfde rigting agterkant ongelukke gedeeltelik veroorsaak deur voertuie wat 'n te kort volgafstand handhaaf. Voertuigfaktore soos swak remligte en remme word ook as 'n oorsaak aangevoer, maar in hierdie studie was daar slegs vier Dieselfde rigting agterkant ongelukke waar 'n voertuigprobleem die oorsaak van die ongeluk was (drie ongelukke remprobleme, een ongeluk remligprobleem). In 'n ander studie is bevind dat onoplettendheid en 'n te kort volgafstand die grootste oorsake van Dieselfde rigting agterkant-ongelukke is (ITS Joint Program Office, 1999). 10% van die menslike faktore wat ongelukke veroorsaak, kan toegeskryf word aan bestuurders wat 'n te kort volgafstand handhaaf (Department of Roads, Nebraska, 2004).

Volgens Golop & Recker (1998) is Dieselfde rigting agterkant-ongelukke geneig om op droë paaie met 'n hoë variasie in spoed te gebeur. Die R44 word daagliks deur baie pendelaars gebruik. Veral tydens die oggendspits (7h00-9h00) gebruik baie pendelaars die pad. Verkeersvolumes van tot 24000 op een dag is in 2003 getel tussen Somerset-Wes en Stellenbosch. Die hoë aantal voertuie wat by kruisings moet versnel en stop, moet dus versigtig wees om Dieselfde rigting agterkant ongelukke te voorkom.

Volgens die analise van die ongeluksvorms word Dieselfde rigting agterkant ongelukke, nie net veroorsaak deur bestuurders wat skielik stop of te stadig rem nie, maar ook deur bestuurders wat agter in die motor voor hom/haar, wat wag om af te draai, vasry. 'n Moontlike faktor wat hierna kan lei is die talle toegangspaaie op die R44, soos in hoofstuk 5.4 bespreek word.

5.1.2 Dieselfde rigting sykant-ongelukke



Figuur 5.1.2 Risikofaktore vir Dieselfde rigting sykant-ongelukke

Hierdie ongelukstipe het verwantskappe met die volgende vlakke van veranderlikes gehad: nalatigheid, oggendspits, daglig en motorvoertuie.

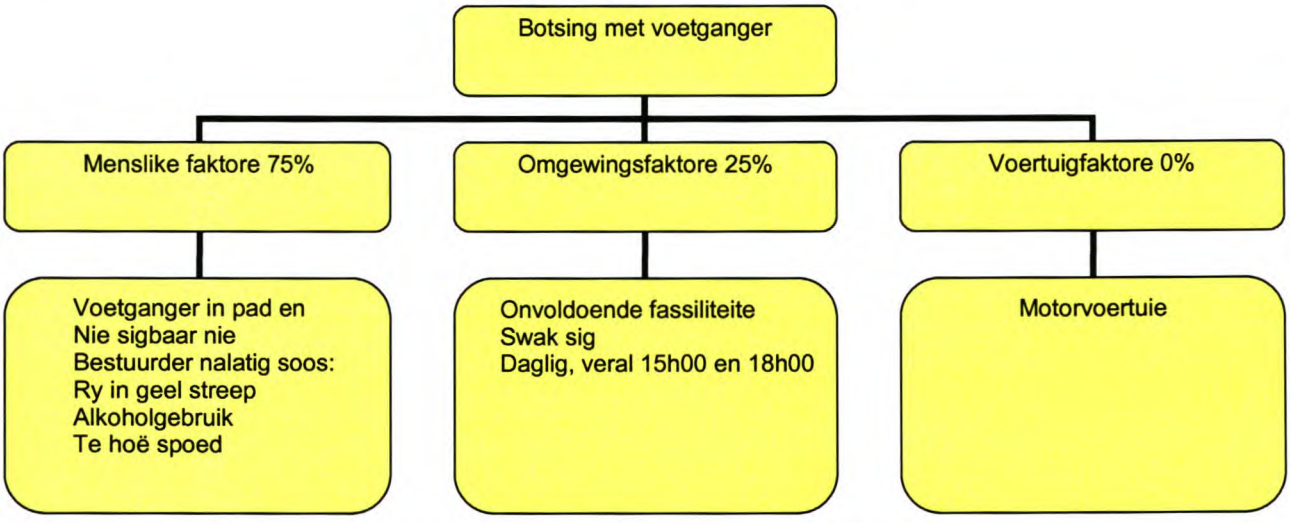
Volgens die Departement van Vervoer (2004) word Dieselfde rigting sykant-ongelukke veroorsaak deur onbedagsame padgebruik, soos onveilige verbysteek, voor ander voertuie inbeweeg en die versuim om flikkerligte te gebruik.

Vanaf die ongeluksvorm word Dieselfde rigting sykant-ongelukke, buiten onveilige verbysteekmaneuvers, ook veroorsaak deur 'n voertuig te tref wat besig is om af te draai. 'n Moontlike faktor wat hierna kan lei is die talle toegangspaaie op die R44, soos in hoofstuk 5.4 bespreek word.

ITS Joint Program Office (1999) beweer dat om te kyk, maar nie te sien nie, die grootste rede vir Dieselfde rigting sykant-ongelukke is. Dit kan dalk te

wyte wees aan bestuurders wat al lank bestuur, en nie dink dat hulle 'n ongeluksrisiko loop nie. Job (1990) het in 'n studie waar daar met Australiese bestuurders by hul huise onderhoude gevoer is, gevind dat bestuurders hulle vermoëns hoër as die gemiddelde skat. Dus dink die meeste bestuurders hulle bestuur beter as ander.

5.1.3 Botsing met voetganger-ongelukke



Figuur 5.1.3 Risikofaktore vir Botsing met voetganger-ongelukke

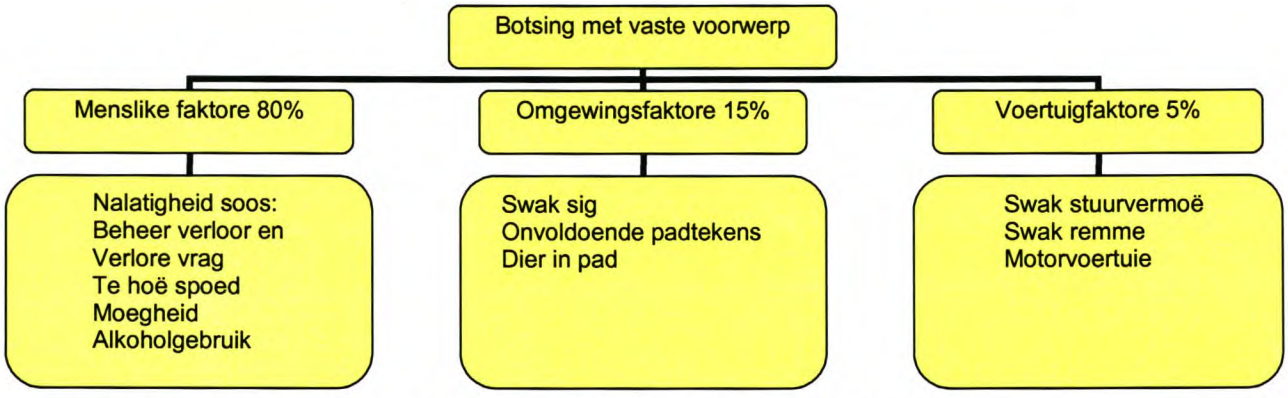
Hierdie ongelukstipe het verwantskappe met die volgende vlakke van veranderlikes gehad: voetganger in pad, daglig, 15h00, 18h00 en motorvoertuie.

'n Studie deur Van Niekerk & Davidson (2001) het bevind dat 66% van voetganger-beserings in Suid-Afrika in daglig plaasvind. Talle voetgangers wat plaaswerkers is, gebruik die R44 om na werk by hul huise te kom. Omdat vele pendelaars om 18h00 ook die pad gebruik, word voetgangers dikwels raakgery as gevolg van onoplettendheid of nalatigheid.

Volgens die Departement van Vervoer (2004) kan ongelukke met voetgangers, benewens voetgangers op die ryvlak, ook toegeskryf word aan hoë voertuigspoed en swak sig. Daarby is swak voetganger-fasiliteite ook 'n

faktor wat tot ongelukke lei. Daar is geen voetgangerkruisings op die R44 nie, maar dit is heelwaarskynlik weens die hoë mobiliteit wat die pad bied.

5.1.4 Botsing met vaste voorwerp-ongelukke

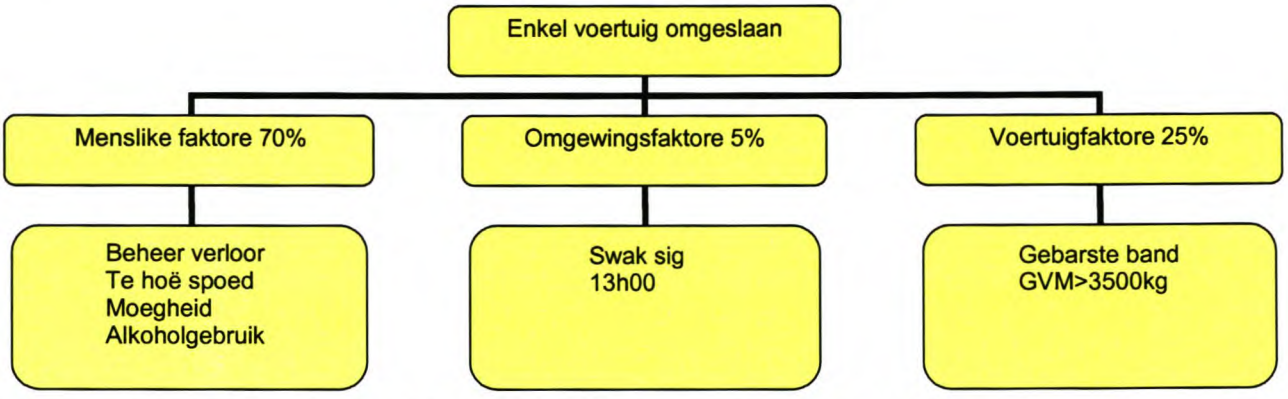


Figuur 5.1.4 Risikofaktore vir Botsing met vaste voorwerp-ongelukke

Hierdie ongelukstipe het verwantskappe met die volgende vlakke van veranderlikes gehad: nalatigheid, dier in pad en motorvoertuie.

Vanaf die ongeluksvorm kan gesien word dat, behalwe vir verlore vrag, bestuurders beheer verloor het en skielik geswaai het op die pad en met die relings, sypaadjie of 'n paal gebots het tydens 'n Botsing met vaste voorwerp ongeluk. Een persoon het aan die slaap geraak en sodoende 'n ongeluk veroorsaak. Volgens die Departement van Vervoer (2004) kan die volgende faktore ook 'n rol speel: spoed te hoog vir omstandighede, swak stuurvermoë en remme van voertuig, swak sig, uitswaai om 'n ongeluk te verhoed en onvoldoende padtekens.

5.1.5 Enkel voertuig omgeslaan-ongelukke



Figuur 5.1.5 Risikofaktore vir Enkel voertuig omgeslaan-ongelukke
(GVM>3500kg is 'n vragmotor met 'n massa groter as 3500kg.)

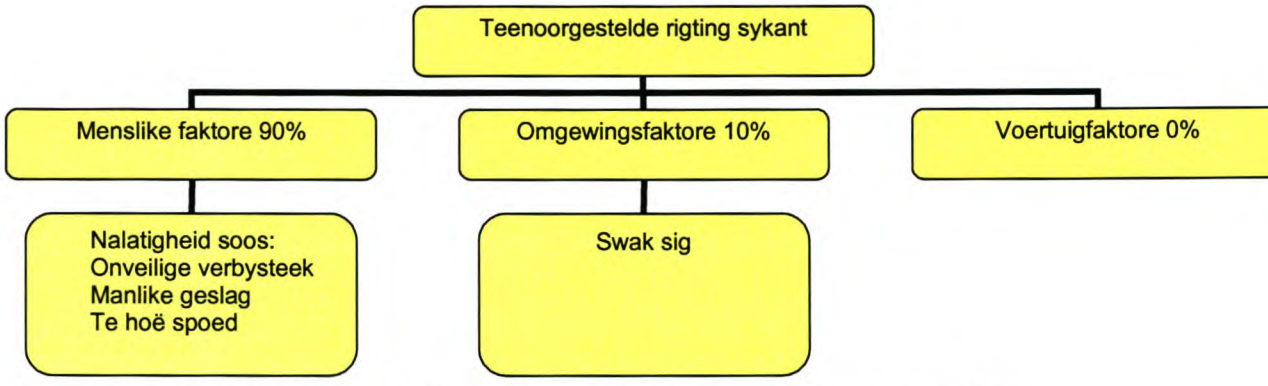
Hierdie ongelukstipe het verwantskappe met die volgende vlakke van veranderlikes gehad: 13h00, GVM>3500, voertuigprobleem en onbekende oorsaak.

Vanaf die verklarings op die ongeluksvorm was die grootste oorsaak van hierdie tipe ongeluk, naas gebarste bande, dat die bestuurders om 'n ander rede beheer oor hulle voertuie verloor het. Volgens die Departement van Vervoer (2004) is die volgende bydraende faktore tot Enkel voertuig omgeslaan ongelukke:

- spoed te hoog vir omstandighede
- moegheid
- swak sig
- 'n band wat bars
- uitswaai om 'n ongeluk te verhoed

Die oorsake van die Enkel voertuig omgeslaan-ongelukke was die moeilikste om vas te stel vanaf die ongeluksvorm. Ongeveer 18% (7 uit 39) van hierdie ongelukstipe se oorsake kon nie bepaal word nie. Te min inligting, soos geen verklarings op die ongeluksvorm, het gelei tot onbekende oorsaak van 'n ongeluk.

5.1.6 Teenoorgestelde rigting sykant-ongelukke



Figuur 5.1.6 Risikofaktore vir Teenoorgestelde rigting sykant-ongelukke

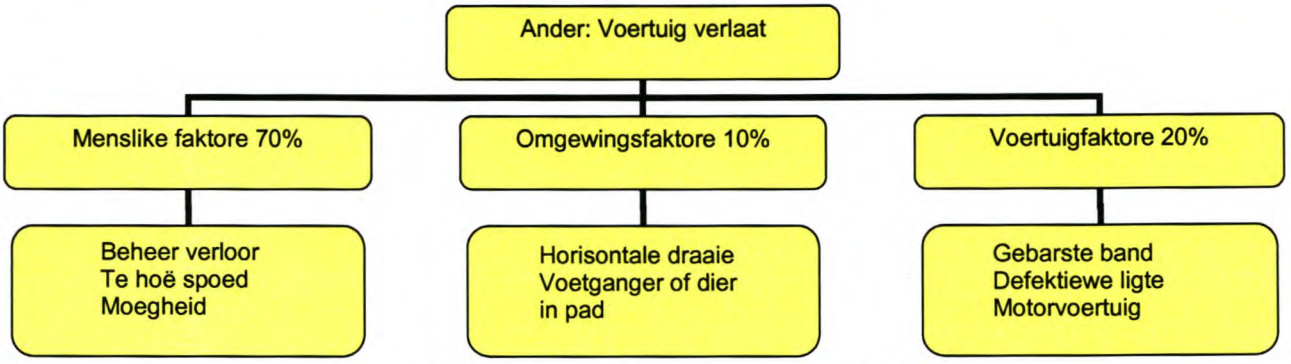
Hierdie ongelukstipe het verwantskappe met die volgende vlakke van veranderlikes gehad: nalatigheid en manlike geslag.

Die analise van die ongeluksvorms en Departement van Vervoer (2004) se bevinding dat Teenoorgestelde rigting sykant-ongelukke deur onveilige verbysteek (wat insluit verbysteek oor die middellyn) veroorsaak word, stem ooreen. Die Departement van Vervoer skryf dit ook toe aan swak sig.

In hierdie studie het Teenoorgestelde rigting sykant-ongelukke 'n verwantskap met die manlike geslag gehad. Die hoë betrokkenheid van jong, manlike padgebruikers in padongelukke is een van die grootste en mees konsekwente waargenome verskynsel in vervoer regoor die wêreld. Volgens Evans (1991) is dit amper 'n wet van die natuur.

Volgens 'n studie wat in Amerika gedoen is, is die grootste risikofaktore om beseer te word in 'n ongeluk, om manlik, tussen die ouderdom 15-34 te wees, alkohol te gebruik en te vinnig te ry (Foland, 2002).

5.1.7 Ander: Voertuig verlaat pad-ongelukke

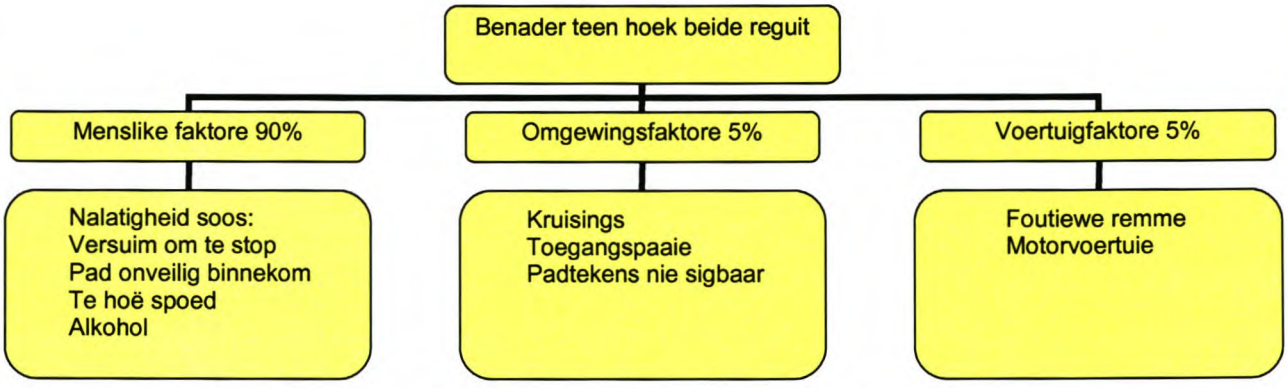


Figuur 5.1.7 Risikofaktore vir Ander: Voertuig verlaat pad ongelukke

Hierdie ongelukstipe het verwantskappe met die volgende vlak van veranderlike gehad: motorvoertuie.

Vanaf die analise van die ongeluksvorms was die grootste oorsaak van hierdie tipe ongeluk, naas gebarste bande, dat die bestuurders om 'n ander rede beheer oor hulle voertuie verloor het tydens 'n Ander: Voertuig verlaat pad-ongeluk. Daar was ook bestuurders wat volgens die ongeluksvorm weens moegheid van die pad afgery het. Pape, Pomerleau, Narendran, Hadden, Everson & Koenig (1995) voer die volgende oorsake vir hierdie ongelukke aan (in afnemende volgorde): Voertuigspoed, verloor beheer weens fisiese toestand, verloor beheer oor rigting, swaai uit vir voorwerp in pad, onoplettendheid en voertuigprobleme.

5.1.8 Benader teen hoek beide reguit-ongelukke

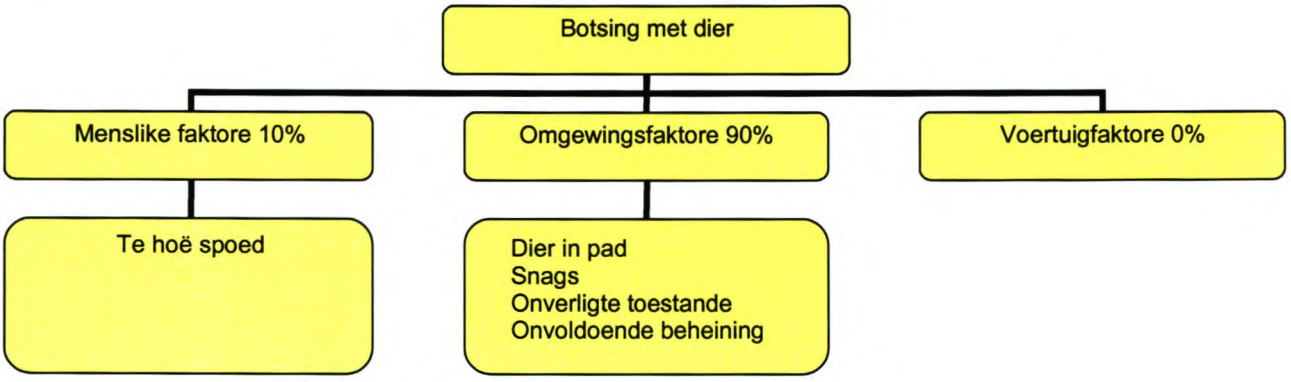


Figuur 5.1.8 Risikofaktore vir Benader teen hoek beide reguit-ongelukke

Hierdie ongelukstipe het verwantskappe met die volgende vlakke van veranderlikes gehad: nalatigheid en motorvoertuie.

Die analise van die ongeluksvorm het gewys dat Benader teen hoek beide reguit-ongelukke by kruisings en toegangspaaie plaasvind. By kruisings het die ongelukke, soos die Departement van Vervoer (2004) ook beweer, plaasgevind weens motoriste wat nie stop nie. By toegangspaaie het die ongelukke gebeur weens die onveilige binnekom op 'n pad, of voertuie wat te vinnig ry op die pad wat binnegekom word. Die onvermoë om toe te gee aan die verkeer is die grootste menslike faktor wat aanleiding gee tot ongelukke (Department of Roads, Nebraska, 2004).

5.1.9 Botsing met dier-ongelukke

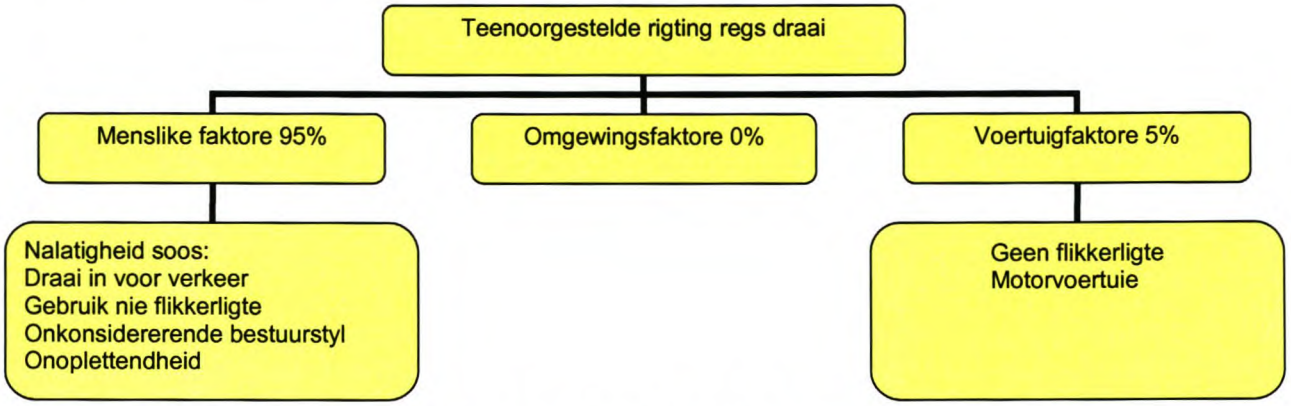


Figuur 5.1.9 Risikofaktore vir Botsing met dier-ongelukke

Hierdie ongelukstipe het verwantskappe met die volgende vlakke van veranderlikes gehad: dier in pad en snags in onverligte toestande ("Night-unlit").

Die risikofaktore van Botsing met dier-ongelukke is baie voor die hand liggend. Diere wat in die pad loop, is veral snags nie sigbaar vir motoriste nie. Indien motoriste te vinnig bestuur, kan hulle nie gou genoeg stop om 'n ongeluk te vermy nie. Alhoewel die R44 nie 'n groot probleem met ongelukke met diere het nie aangesien slegs 18 sulke ongelukke plaasgevind het, is dit moontlik dat al die ongelukke met diere nie aangemeld is nie.

5.1.10 Teenoorgestelde rigting regs draai-ongelukke



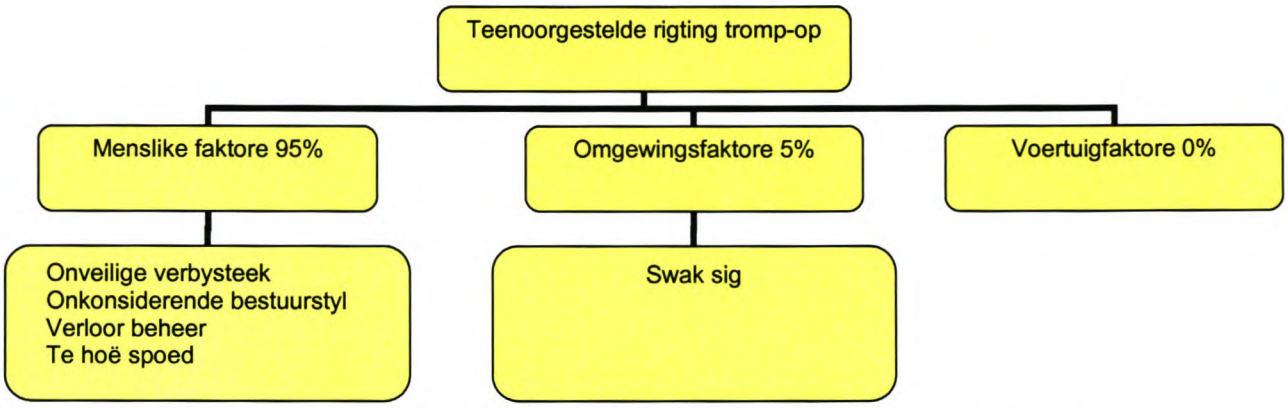
Figuur 5.1.10 Risikofaktore vir Teenoorgestelde rigting regs draai-ongelukke

Hierdie ongelukstipe het verwantskappe met die volgende vlakke van veranderlikes gehad: nalatigheid en motorvoertuie.

Die bevindinge uit die analise van die ongeluksvorm stem ooreen met die Departement van Vervoer (2004) se oorsake aangegee van Teenoorgestelde rigting regs draai-ongelukke. Dit is so te sê uitsluitlik die bestuurder se skuld as so 'n ongeluk plaasvind. Die redes sluit in om voor ander bestuurders in te ry en nie flikkerligte te gebruik nie.

Die rede dat Dieselfde rigting sykant, Botsing met voetganger, Botsing met vaste voorwerp, Ander: Voertuig verlaat pad en Teenoorgestelde rigting regs draai-ongelukke 'n verwantskap met motors het, kan toegeskryf word aan die feit dat 90% van padgebruikers motors is (Provinsiale Administrasie Wes-Kaap, 2004).

5.1.11 Teenoorgestelde rigting tromp-op-ongelukke

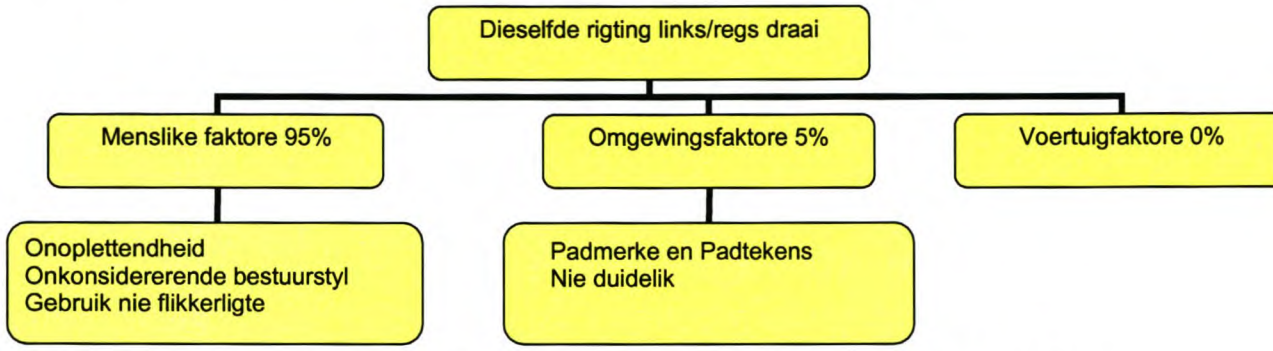


Figuur 5.1.11 Risikofaktore vir Teenoorgestelde rigting tromp-op-ongelukke

Hierdie ongelukstipe het geen verwantskappe met vlakke van veranderlikes gehad nie, weens die klein aantal kere wat die ongelukstipe voorgekom het.

Die bevindinge uit die analise van die ongeluksvorm stem ooreen met die Departement van Vervoer (2004) se oorsake van Teenoorgestelde rigting tromp-op-ongelukke. Dit is so te sê uitsluitlik die bestuurder se skuld as so 'n ongeluk plaasvind. Die redes sluit in om onveilig verby te steek en om beheer te verloor oor die voertuig.

5.1.12 Dieselfde rigting links/regs draai-ongelukke

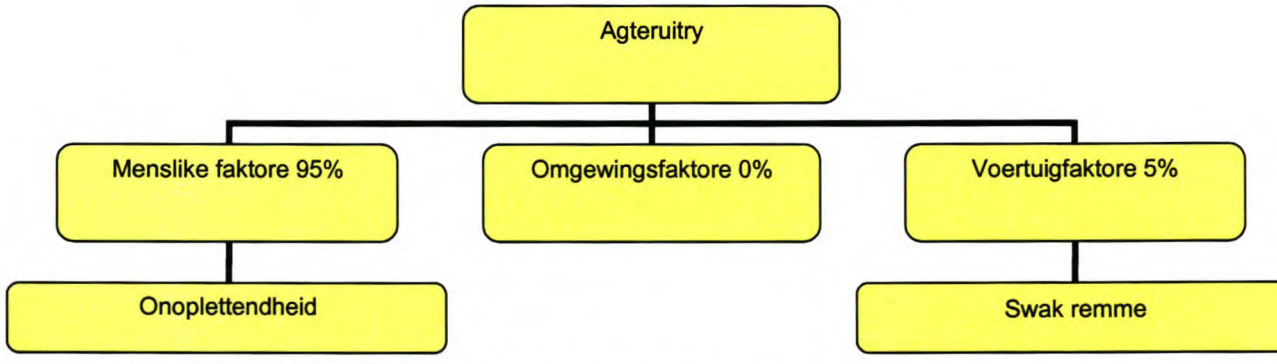


Figuur 5.1.12 Risikofaktore vir Dieselfde rigting links/regs draai-ongelukke

Hierdie ongelukstipe het geen verwantskappe met vlakke van veranderlikes gehad nie, weens die klein aantal kere wat die ongelukstipe voorgekom het.

Die ongelukstipe Dieselfde rigting links/regs draai kan meestal toegeskryf word aan onoplettendheid en bestuurders wat nie hul flikkerligte gebruik nie.

5.1.13 Agteruitry-ongelukke

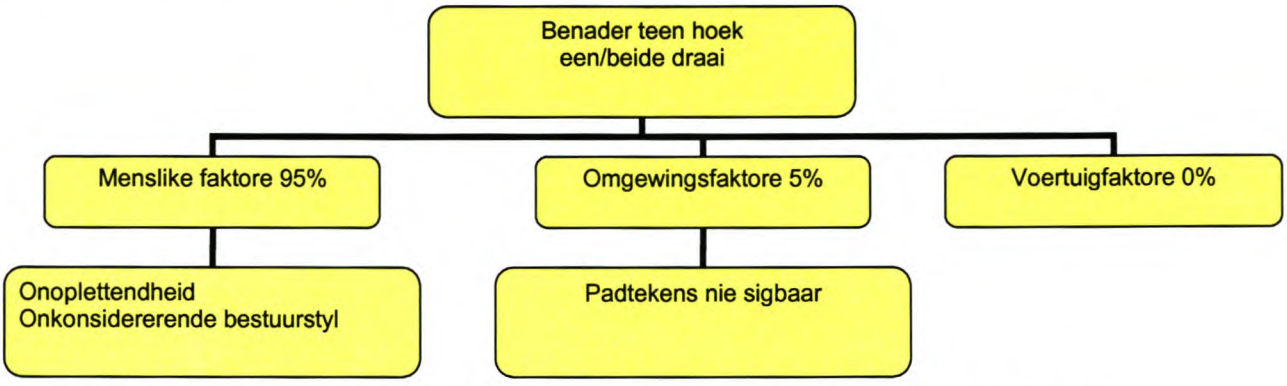


Figuur 5.1.13 Risikofaktore vir Agteruitry-ongelukke

Hierdie ongelukstipe het geen verwantskappe met vlakke van veranderlikes gehad nie, weens die klein aantal kere wat die ongelukstipe voorgekom het.

Agteruitry-ongelukke gebeur meestal as motoriste nie attent is op wat hulle doen en wat om hulle aangaan nie.

5.1.14 Benader teen hoek een/beide draai-ongelukke



Figuur 5.1.14 Risikofaktore vir Benader teen hoek een/beide draai-ongelukke

Hierdie ongelukstipe het geen verwantskappe met vlakke van veranderlikes gehad nie, weens die klein aantal kere wat die ongelukstipe voorgekom het.

Daar is op die ongeluksvorms gesien dat drie uit die vier Benader teen hoek een/beide draai-ongelukke veroorsaak is deur 'n bestuurder wat 'n U-draai, of 'n driepuntdraai gemaak het. Die bestuurders was nie oplettend tydens die beweging nie.

5.2 Vergelyking van risikofaktore

In tabel 5.2.1 word al die risikofaktore wat in hierdie studie bepaal en bespreek is, vergelyk.

In hoofstuk 5.1 is die risikofaktore vir elke ongelukstipe wat op die R44 voorgekom het, bepaal. Elke risikofaktor van die verskeie ongelukstipes is geweeg met die aantal kere wat die betrokke ongeluk plaasgevind het. Daarna is die gemiddelde risikofaktore bereken.

Die onbekende faktore wat as "nie van toepassing" (NVT) gemerk is, se persentasie is nie beskikbaar nie. Die "Tri-Level Study" (Treat, JR. *et al.* 1979) se in-diepte ondersoekspan kon 20% van die ongelukke se definitiewe oorsake nie aflei nie, en die ter plaatse span kon 26% van die ongelukke se definitiewe oorsake nie aflei nie.

Tabel 5.2.1 Vergelyking van risikofaktore

	Risikofaktore (%) wat lei tot padongelukke			
Verwysing	Menslike faktore	Voertuigfaktore	Omgewingsfaktore	Onbekende faktore
Austroads (1994)[1]	67	4	4	NVT
Austroads (1994)[2]	95	8	28	NVT
(Treat, JR. *et al.* 1979)[3]	71	13	4	NVT
(Treat, JR. *et al.* 1979)[4]	64	19	4	NVT
Departement van Vervoer (2004)	70-80	10-15	5-10	NVT
Hierdie studie: uit 404 ongelukke	77.7	6.4	7.2	8.7
Hierdie studie: vanaf ongelukstipes bepaal	75.4	10.2	14.5	NVT

[1] Hierdie risikofaktore oorvleuel nie.

[2] Hierdie risikofaktore oorvleuel met ander risikofaktore.

[3] Hierdie is definitiewe risikofaktore wat deur in-diepte ondersoeke bepaal is.

[4] Hierdie is definitiewe risikofaktore wat deur ter plaatse ondersoeke bepaal is.

Vanaf tabel 5.2.1 kan eerstens afgelei word dat alle ander studies met hierdie studie se bevindings ooreenstem dat die menslike faktor die grootste risikofaktor is wat lei tot padongelukke. Die risikofaktore bepaal deur na die ongelukstipes te kyk, se voertuig- en omgewingsfaktore is redelik hoër as die faktore bepaal deur na die 404 ongelukke te kyk. Dit kan grootliks toegeskryf word dat daar nie onbekende risikofaktore by die ongelukstipe risikofaktore bepaling was nie, en die inbegrip van relevante omgewingsfaktore wat in die literatuur beskryf word.

Omdat die gemiddelde risikofaktore bereken deur die verskeie ongelukstipes in ag te neem van dieselfde orde as die risikofaktore van die Departement van Vervoer is, kan die verskeie ongelukstipes se risikofaktore as 'n verwysingspunt

in Suid Afrika gebruik word. Alhoewel die omgewingsfaktore van die ongelukstipes op tabel 5.2.1 effe hoog lyk, het Bester (1994) ook bevind dat padeienskappe vir meer ongelukke verantwoordelik is as wat tans geglo word.

5.3 Ander verwantskappe

Die verwantskappe wat volg, is geverifieerde verwantskappe wat volg uit die totale-, enkel- en veelvoertuigbotsingsdata. Verwantskappe wat van toepassing is op spesifieke ongelukstipes, word nie herhaal vanaf hoofstuk 5.1 nie.

5.3.1 Totale voertuigbotsings

- Op alle weeksdae is nalatigheid die grootste rede vir ongelukke op die R44.

- Op Vrydae is ongelukke meestal mans se skuld.

- Ongelukke wat deur mans veroorsaak is, het 'n verwantskap met nalatigheid.

- Vroue veroorsaak meer ongelukke in die daglig.

- Die volgende ure het met nalatigheid én die skuldige party as die bestuurder 'n verwantskap: 7h00, 8h00, 9h00, 13h00 en 15h00.

- Daglig het 'n verwantskap met nalatigheid en bestuurder.

5.3.2 Enkelvoertuigbotsings

- Voertuigprobleme het meestal in die daglig plaasgevind.

- Indien die skuldige party 'n onbekende persoon was, is die ongelukstipe Botsing met vaste voorwerp.

- Wanneer 'n ongeluk se oorsaak (en dus ook skuldige party) onbekend was, het die ongeluk snags in onverligte toestande plaasgevind. Hierdie ongelukke het in motors (teenoor ander voertuigtipes) plaasgevind.

- Nalatigheid het 'n verwantskap met daglig.

- Die manlike geslag het 'n verwantskap met nalatigheid en om die bestuurder te wees.

- Op Woensdae is die oorsaak van ongelukke meestal nalatigheid waar die skuldige party die bestuurder is.

- Op Maandae, Dinsdae, Woensdae en Saterdae gebeur ongelukke meestal in die daglig, en op Donderdae en Vrydae snags in onverligte toestande.

- Ongelukke om 13h00, 18h00, en 21h00 word meestal in motors gemaak.

- Vroue veroorsaak meer ongelukke in die daglig.

5.3.3 Veelvoertuigbotsings

- Op Woensdae en Donderdae het die meeste Dieselfde rigting agterkant-ongelukke plaasgevind.

- Ligte afleweringsvoertuie was meestal 8h00 in ongelukke, terwyl motors veral om 7h00, 12h00, 13h00, 14h00 en 17h00 in ongelukke was.

- Die ongelukstipes Dieselfde rigting agterkant, Dieselfde rigting sykant en Teenoorgestelde rigting regs draai het 'n verwantskap met Vrydae.

- Die ure 13h00 en 18h00 en die dae Vrydae en Sondae het 'n verwantskap met die manlike geslag.

- Vroue het meestal ongelukke in die dag gemaak, terwyl onverligte nagtoestande 'n verwantskap met mans het.

- Nalatigheid was bedags en snags die grootste rede vir ongelukke.

- Bedags was ongelukke om 7h00, 13h00 en 15h00 as gevolg van nalatigheid wat die bestuurder se skuld was.

- Vrydae het 'n verwantskap met verligte nagtoestande. Verligte nagtoestande is wanneer die pad snags verlig is.

5.4 Toegangspaaie

Daar is in hoofstuk 3.1.4 gevind dat die oorgrote meerderheid (85 uit 89) spasiërings van die toegangspaaie van die R44 te kort is. Die gemiddelde spasiëring tussen Somerset-Wes en Stellenbosch is 475m en die gemiddelde spasiëring tussen Stellenbosch en Klapmuts is 451m. Dit is slegs ietwat meer as 'n kwart van 1600m wat die "Road Access Guidelines" van die Provinsiale Administrasie Wes-Kaap (2002) aanbeveel.

Die afstande tussen die toegangspaaie op die R44 wat te kort is, is heel waarskynlik 'n groot oorsaak van ongelukke. Die R44 verskaf beide die funksies

mobiliteit en toeganklikheid, waarvan die toeganklikheid (spasiëring van toegangspaaie) se limiete oorskry word. Op 'n pad soos die R44 wat so hoë mobiliteit (in terme van spoedbeperkings) bied, behoort daar nie so baie toegange te wees nie.

Tabel 5.4.1 wys die oorsake van ongelukke op die R44 soos dit in hierdie studie uit die analise van die ongeluksvorms spruit. In hierdie studie was daar nie 'n moontlike oorsaak as "toegangspaaie" gegee nie. Indien daar ongelukke gebeur het as gevolg daarvan, sal dit in tabel 5.4.1 onder nalatigheid of onbekende oorsaak val. Hierdie oorsaak behoort onder slegte padoppervlakte te val as die foutiewe spasiëring van 'n toegangspad 'n ongeluk veroorsaak het. Dit is egter baie moeilik om daardie oorsaak van 'n ongeluksvorm af te lei, veral as die kwaliteit van die kilometerdata swak is.

Tabel 5.4.1 Oorsake van ongelukke

Oorsaak	Aantal	%
Nalatigheid	266	65.8
Voetganger in pad	39	9.7
Onbekend	35	8.7
Voertuigoorsaak	26	6.4
Dier in pad	23	5.7
Alkoholgebruik vermoed	9	2.2
Slegte padoppervlakte	6	1.5
	404	

Die feit dat die R44 'n probleem het met motoriste wat te vinnig ry, vererger die impak van die ongenoegsame spasiëring van die toegangspaaie.

6. Aanbevelings

Op grond van die bevindings en gevolgtrekkings van hierdie verslag word die volgende aanbevelings gemaak:

6.1 Ongeluksvorms

- Aandag moet geskenk word aan verskeie aspekte van die datakwaliteit van die ongeluksvorms.
- Daar moet ondersoek ingestel word na die lengte van die ongeluksvorm (vier A4 blaaie) en die tyd wat toegelaat word om dit in te vul.
- Toepaslike opleiding moet verskaf word aan die verkeerspolisie en polisie om meer akkurate kilometerlesings op die vorms in te vul, sodat responsfoute uitgeskakel kan word. Vanaf die bestaande kilometerborde elke 10 kilometer moet die presiese ligging van die ongeluk gemeet word, en nie geskat word nie.
- Opleiding behoort ook met betrekking tot die interpretasie van die veranderlikes verskaf te word, veral vir die veranderlikes ongelukstipe en padoppervlakte, sodat die konsekwentheid van data verbeter kan word.
- Ongelukke wat snags plaasvind waar daar net een voertuig betrokke is, se ongeluksvorm moet meer volledig ingevul word, sodat konsekwentheid van dekking bereik kan word.
- Maatstawwe moet ingestel word om die hoeveelheid vermiste data te verminder, veral vir die veranderlikes geslag en ouderdom.
- Ongeluksdata moet korrek vanaf die ongeluksvorms na die databasis oorgedra word, sodat die korrekte dataversamelprosedure gevolg word.
- Indien daar vir alkohol getoets word en die alkoholvlak is te hoog, moet dit op die ongeluksvorm neergeskryf word.
- 'n Nuwe kategorie, naamlik Ander: Voertuig verlaat pad, moet geskep word om padongelukke beter te kan beskryf.

Deur die bogenoemde aanbevelings te volg, sal die resultaat wees dat die ongeluksdata meer komponente van kwaliteit sal beskik soos deur O'Day (1993) beskryf word en die ongeluksdata meer nuttig aangewend kan word.

6.2 Ongelukvoorkoming

6.2.1 Nalatigheid het 'n verwantskap met daglig vir alle ongeluksgroepe (totale, enkel- en veelvoertuigbotsings). Motoriste moet bewus gemaak word dat die meeste ongelukke helder oordag plaasvind en grotendeels aan menslike faktore toegeskryf kan word.

6.2.2 Snags moet motoriste uitkyk vir diere op die pad en nie te vinnig ry nie sodat daar betyds gestop kan word indien 'n dier oor die pad hardloop. Beter beligting en heinings langs paaie kan ook ongelukke met diere verhoed.

6.2.3 Motoriste moet ingelig word dat die twee ongelukstipes wat die meeste in hierdie studie voorgekom het, Dieselfde rigting agterkant- en Dieselfde rigting sykant-ongelukke, voorkom kan word deur 'n groter volgafstand te behou, oplettend te wees en meer bedagsaam te bestuur. Persone wat motors bestuur (in vergelyking met ander voertuigtipes) kan veral Dieselfde rigting sykant-ongelukke so voorkom.

6.2.4 Bestuurders wat 'n hoofpad vanaf 'n sypad binnekom, moet meer geduldig wees en toegee aan verkeer op die hoofpad, eerder as om 'n kans te waag en op 'n onveilige manier die pad binne te kom. Bestuurders op die hoofpad moet by die spoedgrens bly om sodoende sigbaar te wees vir persone wat die pad binnekom.

6.2.5 Streng boetes moet uitgereik word aan motoriste wat nie stop by kruisings nie, spoedoortreders, asook bestuurders wat die alkohol-perk oorskry.

6.2.6 Daar moet met versigtigheid verbygesteek word, veral op 'n tweelaan pad.

6.2.7 Bestuurders moet bewus gemaak word daarvan dat op Vrydae die meeste ongelukke plaasvind.

6.2.8 Gedurende spitstye moet bestuurders attent wees op 'n hoër ongelukrisiko. In die oggend spits moet daar teen Dieselfde rigting agterkant- en Dieselfde rigting sykant-ongelukke gewaak word. In die middag en aand spitstyd moet daar ook teen Dieselfde rigting agterkant-ongelukke gewaak word.

6.2.9 Jong mans moet bewus gemaak word dat hulle 'n verhoogde ongelukrisiko loop. Vroue moet bedag gemaak word dat, alhoewel hulle verantwoordelik is vir minder ongelukke as mans, dat ongelukke wat deur vroue veroorsaak word, meestal bedags plaasvind.

6.2.10 Ligte afleweringsvoertuie moet groter volgafstande handhaaf om Dieselfde rigting agterkant ongelukke te voorkom, veral in die oggend spitstyd.

6.2.11 Bande van voertuie moet in 'n goeie toestand wees en 'n geskikte spoed moet gehandhaaf word om Enkel voertuig omgeslaan ongelukke te verhoed. Bestuurders van vragmotors met die klassifikasie GVM>3500kg moet hul voertuie beter beheer sodat dit nie omslaan nie.

6.2.12 Die volgende komponente van 'n voertuig moet in 'n goeie toestand wees om ongelukke te verhoed: bande, remme, remligte, flikkerligte en ligte.

6.2.13 Daar moet fasiliteite geskep word vir voetgangers om die pad veilig oor te steek. V oetgangers m oet n ie op die r yvlak l oop nie. V oetgangers moet bewusgemaak word van hulle hoë ongeluksrisiko, veral bedags.

6.2.14 Botsing met vaste voorwerp-ongelukke kan voorkom word deur minder nalatig te wees. Persone wat op hul voertuie vrag dra, moet waak dat die vrag nie verlore gaan tydens 'n reis nie.

6.2.15 Padmerke en padtekens moet duidelik sigbaar wees en in 'n goeie toestand wees.

6.3 Toegangspaaie

6.3.1 Met die snelgroeiende verkeersvolumes, en motoriste wat te vinnig ry, sal die spasiërings-probleem van die R44 tussen Somerset-Wes en Klapmuts aangespreek moet word om ongelukke te voorkom. Die enigste oplossing blyk te wees om die spoedbeperking te verlaag, veral omdat die ontwerp-spoed van die pad laer is as wat tans toegepas word.

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Bylaag A - Koerantberigte

Die Burger 7 April 2004

Padongelukke kan lei tot 'geldramp in Suid-Afrika'

KAAPSTAD. -- Padongelukke is die grootste oorsaak van onnatuurlike sterftes onder Suid-Afrikaanse kinders tussen 4 en 15 jaar.

Die land stuur op 'n finansiële ramp af weens die aantal sterftes wat jaarliks op nasionale paaie plaasvind, is gister bekend gemaak op die vooraand van die Suid-Afrikaanse viering van Wêreldgesondheidsdag vandag .

Mnr. Piet Meyer, provinsiale minister van gesondheid, het gesê 'n nasionale aksieplan is nodig om toenemende padsterftes hok te slaan.

Luidens amptelike statistieke word 800 kinders jaarliks by die Rooi Kruis-kinderhospitaal weens padongelukbeserings behandel. Sulke ongelukke sal teen 2010 wêreldwyd die derde grootste oorsaak van verlamming op aarde wees.

Volgens Meyer vind 80% van alle padongelukke in Afrika plaas en plaas dit dié vasteland toenemend in 'n geldelike krisis. Hy meen die geldelike las sal aanhou toeneem weens die stygende getal motors . -- (Johan Rheeder)

Eikestadnuus 21 November 2003

R44 not designed for high speeds

CARIN SMITH

“The main problem is the speed allowed on the R44 in relation to the design of the road and the numerous access road.”

This is the opinion of Prof Christo Bester from the Department of Civil Engineering at the University of Stellenbosch.

Prof Bester would like to see better law enforcement on the route to encourage drivers to keep safe following distances for instance. He uses the example of a car in the fast lane, wanting to turn off to the right and slowing down accordingly. A driver behind that car who is not keeping a proper following distance and going too fast, will not be able to stop in time. He says a number of access roads have been eliminated in the past.

Prof Bester himself uses the route daily. Something else that bothers him, is the guardrail directly on the median at a certain spot. The purpose seems to be to prevent drivers from making a U-turn there. In his opinion this is creating a danger should someone drive too fast, lose control and go off the road.

Another dangerous tendency he has noticed on his daily trips from Somerset West to Stellenbosch is the number of people clutching cell phones while driving, and yet another is to have a traffic light at a stretch of road where high speeds are allowed. If one is travelling at 80km/h, for instance, an even longer time is needed for the yellow light in order to have enough time to stop.

In general, he states, the problems on the R44 stem from the heavy traffic the road carries coupled with the lower speeds the road was actually designed for. Considering the length of the vertical curves one could say the general speed should be 80km/h. If a driver is travelling at 100km/h at a certain point in distance, then he will not be able to stop by the time the hazard comes into view. Yet another problem is the cyclists and pedestrians on the R44.

According to a statement issued by the Stellenbosch Municipality there have been 11850 fines issued for speeding on the Strand Road since January. The Traffic Department patrols the route daily and has a speed trap once a week. This year they have already had five road blocks and nine "stop and checks". According to the statement, the speed limits on the R44 are not regarded as being too high. It is seen as relatively low, especially taking into account that traffic flow should not be impaired by too many obstructions.

Eikestadnuus 29 Augustus 2003

Accidents make the R44 a dangerous road

Martin Hunting and neighbours, write:

We who reside on the R44 from Stellenbosch to Klapmuts, are seriously concerned about the growing number of deaths and injuries occurring on that road.

Numerous requests to the Rural Council and the Traffic Department have resulted in no significant decrease in the number of accidents as the records will show.

The R44 is getting synonymous with being a dangerous road for motorists, schoolchildren and pedestrians alike. It is clearly a situation that Stellenbosch does not need.

We would like to know the answer to the following question: Why has the expensive land purchased on the R44 never been utilized for a dual road? Traffic density increases, yet the land lies unused.

Could the Traffic Department publish some sort of format of the steps they intend to take, in order to overcome the situation that has existed for far too long?

Eikestadnuus 30 April 2004

R44 wek steeds kommer by publiek

EIKESTADNUUS is genader deur lede van die publiek wat besorg is oor die verkeersveiligheid by sekere kruisings op die R44. Een persoon het genoem dat trekkerbestuurders met sleepwaens vol druiwe soms tot 'n halfuur moet wag voor hulle veilig kan oorsteek.

By navraag oor wat gedoen kan word om die R44/Annandale-kruising te beveilig, het mnr. Neville Langenhoven by monde van mnr. Pieter Loftus,

woordvoerder van die Stellenbosch Munisipaliteit, geantwoord dat dié stuk pad as 'n provinsiale hoofpad onder die Boland Distriksmunisipaliteit se jurisdiksie val, terwyl die polisiëring en verkeerswetstoepassing deur die Stellenbosch Munisipaliteit behartig word.

Omrede die hoë voertuigvolume en die spoed waarteen voertuie op die R44 beweeg, is dié kruising reeds in die verlede opgegradeer en veranderinge is aan die ontwerp en beligting gedoen.

Na verneem word, het die Boland Distriksmunisipaliteit reeds goedkeuring op provinsiale vlak verkry vir die aanbring van verkeersligte by die Annandale-kruising en reeds daarvoor begroot.

Volgens mnr. Langenhoven is die hoë ongeluksyfer 'n groot bron van kommer vir Stellenbosch se verkeersdienste en word wetstoepassing en spoedmeting gereeld op die R44 gedoen.

Op Vrydag, 23 April, is 1044 motoriste byvoorbeeld betrap dat hulle die spoed op daardie gedeelte van die pad waar die ongeluk die volgende dag plaasgevind het, oortree het. Die moontlikheid om meer permanente sowel as mobiele spoedkameras daar aan te bring, word ook ondersoek.

"Sonder die hulp en samewerking van die motoriste sal ons nie daarin slaag om padsterftes aan te spreek nie," sê mnr. Langenhoven. "Al ander opsie vir die verkeersdienste is om genadeloos toe te slaan op motoriste wat die padreëls verontagsaam."

Supt. Johan Joubert van die Ongeluksondersoekburo maan ook die publiek om versigtig en defensief te bestuur. "Wees meer verdraagsaam op die R44. Let op jou spoed as jy kruisings nader. As jy op die sy-roetes ry, maak seker die pad is vry voor jy dit oorsteek."

Eikestadnuus 30 April 2004

R44 eis ma, dogter

CARIN SMITH

"Daai pad het nou genoeg lewens geëis."

Só voel mnr. Gavin Pridgeon oor die R44 nadat sy vrou, Elizebeth, en haar moeder verlede Saterdag, 24 April die kruising met die Annandalepad gesterf het. Hulle was op pad na die Somerset Mall toe die ongeluk omstreeks 13:10 gebeur.

Terwyl die nooddienste op die toneel besig was, het die verkeer op die R44, veral aan Stellenbosch se kant, later opgedam tot verby die vliegveld.

Die afgelope twee jaar was daar 26 ongelukke by dié kruising waarin drie mense die lewe gelaat het.

Volgens 'n ooggetuie het 'n Mercedes-Benz vanuit die Annandale-pad oor die R44 beweeg. 'n Aankomende BMW wat uit die rigting van Somerset-Wes gery het, het die Mercedes teen die bestuurderskant getref. Albei voertuie het op die eiland in die middel van die hoofweg tot stilstand gekom.

Volgens die bestuurder van die BMW, me. Renée Otto (26) van Paarl, het alles baie skielik gebeur en het sy nie eens kans gehad om rem te trap nie. Sy en haar twee passasiers is na die Stellenbosch Medi-Clinic vervoer waar hulle vir beserings behandel is.

Mev. Pridgeon van Swawellaan, Onder-Papegaaiberg, wat die Mercedes bestuur het, het later op die toneel aan veelvuldige beserings beswyk onderwyl sy nog in die motor vasgepen was. Haar moeder, mev. Jacoba Swart (79) van Geluksoord, wat saam met haar gery het, is op slag dood.

Mev. Pridgeon is die eggenote van mnr. Gavin Pridgeon, die hoof van die sanitasie-afdeling van ingenieurs- en tegniese dienste by die Stellenbosch Munisipaliteit.

Mnr. Pridgeon onthou sy vrou as 'n wonderlike mens wat altyd gelag en nooit kwaad geword het vir enigiemand nie. Sy het ook nooit gehuiwer om haar medemens te help nie. Die egpaar het twee kinders, Roxanne (14) en Mikhail (12).

"Ek gaan dit nie daar los nie," het 'n hartseer mnr. Pridgeon gister aan *Eikestadnuus* gesê. Hy gaan alles in sy vermoë doen om te sorg dat die R44 beveilig word sodat nie nog lewens daar geneem word nie.

'n Diens vir die oorledenes is gister in die NG Kerk Stellenbosch gehou.

Ooggetuies wat Saterdag se ongeluk sien gebeur het, word versoek om supt. Johan Joubert te skakel by 082 650 9620.

Bylaag B - Oorspronklike analise

A nr	A type	Comments
12	Accident with pedestrian,rather accident with fixed object	Pedestrian crossing road,A had to swerve out,hit pole on side of road
39	Approach at angle-both travel straight	A enters road B is travelling straight on,collision
58	Head/Rear end	B making an U-turn,drives in front of A,collision
86	Approach at angle,both travel str	B enters road A is travelling straight on,collision
115	Head/Rear end	A crosses intersection,pedestrian infront of car,A brakes and B collides from behind
116	Other,rather Other: Accident with loose object	B+A travel opposite directions,tires fall off A in front B,collision
117	Sideswipe-opposite direction	A did't see B,collision
118	Approach at angle,both travel str	A foot slip off brake onto petrol and hits B+C+D
119	Sideswipe-same direction,rather opposite direction	B+A travel opposite directions,both overtaking,sideswipe
120	Head/Rear end	B(behind) loses control and collides into A(infront)
121	Turn right from wrong lane,rather sideswipe same direction	B overtakes A and hits A in process
198	Single vehicle overturned (male)	A vehicle leaves road and falls over
200	Single vehicle overturned (male)	A rolls vehicle off road
202	Head/Rear end	B jumps stopstreet and moves in front of A,collision unavoidable
217	Unknown,rather turn left from wrong lane	A(infront)+B(behind) travel straight,B moves to right to turn off left,collision
247	Head/Rear end	B waiting to turn right,A comes from behind,collision
248	Unknown,rather Other: Accident with loose object	B+A travel opposite directions,B's bricks falls on A
249	Head/Rear end	Unknown-unclear
316	Head on	A(drive N) passes another vehicle,loses control and hits B(drive S)
318	Unknownrather accident with pedestrian	Pedestrian crossing road,collision
339	Other,rather sideswipe-opposite direction	B+A travel opposite directions,B hits A
352	Single vehicle overturned (female)	A travelling straight,tyre burst,hits curb and lose control
355	Sideswipe opposite direction	A turns right at stop into traffic,B drives straight,sideswipe
367	Single vehicle overturned (male)	A vehicle slips+leaves road+rolls
414	Unknown, rather Other: vehicle left road	Driver allegedly has blackout and drives off road
488	Unknown,rather approach at angle,both travel straight	A crosses stop,other vehicle comes from left and doesn't stop at stop
491	Accident with pedestrian	Pedestrian crossing road,collision
506	Head/Rear end	B overtakes A and hits A at back
507	Sideswipe-same direction	A moves to right lane to overtake B but can't,when moving back to lane hits A
512	Single vehicle overturned (female) Toyota Corolla	A swerves out for cyclists,rolls vehicle off road
530	Accident with pedestrian	Pedestrian crossing road,collision
566	Accident with pedstrian	Fruit seller in middle of intersection
667	Turn right from wrong lane,rather Other: vehicle left road	A overtakes truck on right side,leaves road on right side to avoid accident with oncoming traffic
668	Head/Rear end	Unknown-unclear
678	Sideswipe-opposite direction(1)	B turns in infront of A travelling straight,A brakes+swerves in front of C,travelling in opposite direction

A nr	Possible cause 1	Possible cause 2	Speedlimit
12	P in road	Early morning (01h10)	60,regoor Stellenbosch Golfklub
39	A (male) negligent	A old-age (60 years)	Intersection Voorpaardeberg
58	B negligent,dangerous U-turn		DR01053xMR00027
86	B negligent		DR01053xMR00027? Defnitief Anandale
115	P crossing crossing dangerously		Km 51.75; 4-rigting stop Klapmuts
116	A negligent fastening of tires		Km 51.75
117	A negligent		Km 51.75; 4-rigting stop Klapmuts
118	A loses control (foot slip off brake)		Km 51.75; 4-rigting stop Klapmuts
119	A/B negligent		100
120	A negligent,loses control on bend		100-onverwagplaas
121	A negligent,late indicator use		Km 50.05
198	A negligent	Early morning (05h30)	100
200	A liquor/drug suspected/tested		Km 50.15
202	B liquor/drug suspected/tested	B negligent	Km 50.77 Merchant straat
217	B (male) negligent		100,regoor Boland Pluimvee,tussen Klapmuts+Wellington
247	A (male) negligent		Intersection Suid Agter Paarl pad
248	Truck B (male) negligent,lets freight come loose		60,regoor Butterfly World
249	Unknown/A(male)/ B(unknown) negligent		60,regoor Butterfly World
316	A loses control		Km 48.8
318	P in road		Km 24.45?-Klapmuts AD Stores
339	B (male) negligent		100
352	Tyre burst		Km 49.15
355	A/B(both male) negligent	Use of cellphone suspected (both)	MR00027xMR00205? Defnitief intersection with R45
367	A negligence+wet road	Late at night (00h45)	DR01043xMR00027 Eikendal road
414	Medical reason		Yonder hill plaas?
488	Other vehicle negligent (unknown)	Late at night (23H30)	MR00027xMR00189-Klapmuts intersection
491	P in road	Early morning (01h10)	DR01043xMR00027?800m from AD stores defnitief
506	B (male) negligent,dangerous overtaking		100,500m from Uncle Jimmy's,tussen Klapmuts+Wellington
507	A(male) negligent,dangerous overtaking		60,150m v Greenhills robot
512	A(female) negligent/dangerous cycling		100
530	P in road	P 2 years old	100-St Martins plaas
566	Fruit seller in middle of intersection		Klapmuts 4way
667	A(male) negligent,dangerous overtaking	Early morning (05h00)	100,1km v Durbanville afrit,tussen Klapmuts+Wellington
668	Unknown/A(male)/ B(male) negligent		Under N1 bridge
678	B (male) negligent	B (60y) only has right eye	100,by grondpad indraai

699	Other,rather accident with pedestrian(1)	Pedestrian crossing road,collision
700	Head/Rear end	A waiting to turn right,B comes from behind,collision
701	Other (Scooter rear tire burst),rather Other: Vehicle left road	Scooter rear tire burst and steers off road
712	Accident with pedestrian	Pedestrian crossing road,collision
838	Other (Accident with fixed object)	A sverves to avoid accident scene,hits sandwal
839	Head/Rear end	B(infront)+A(behind) collide
840	Sideswipe-same direction	B making an U-turn,drives in front of A,hits side
841	Accident with fixed object	A slips on wet road while braking and hit roadrailings on side
843	Accident with animal	A drives into dog
844	Approach at angle,both travel str	B turning right, A driving straight collides in B
845	Head on	B(travel South) overtakes another vehicle and hits A(travel North) in process
846	Sideswipe opposite direction, rather same direction	A travelling straiht, B passes on right, collision
853	Accident with animal	Dog in road
887	Single vehicle overturned (male) GVM>3500kg Isuzu 1984	
1027	Approach at angel-one or both turning,rather Head/Rear end	A waiting to turn right,B comes from behind,collision
1144	Turn right in face of oncoming traffic	A&B travel opposite direction,B turns right, right in front of A
1173	Accident with animal	A drives into dog (alleged Springbok!)
1180	Sideswipe-same direction	A stops for other vehicle stationary,hits passing vehicle B
1182	Other (Accident with fixed object)	A brakes fails,leaves road into tree stump
1184	Head/Rear end	B(behind)+A(infront) both travel straight,collide
1328	Accident with pedestrian	A swerves to right to avoid accident with other vehicle suddenly turning,loses control,goes right off to gravel on right
1383	Single vehicle overturned	B enters road A is travelling straight on,A brakes for B and rolls vehicle
1388	Sideswipe-same direction,rather accident with fixed object	A changes lane and hit curb
1391	Accident with pedestrian	P crossing road
1394	Other,rather Other: Accident with cyclist	A brakes to avoid cyclist crossing road but hits cyclist
1396	Other,rather single vehicle overturned	A(male) lose control
1401	Head/Rear end	A turning right, B driving straight collides in A
1405	Sideswipe-opposite direction	B loses control and spins and A can't past it without hitting it
1407	Turn right in face of oncoming trafic	A crosses road,collides with B,B indicated to not go on straight but turn
1409	Head on	Unknown
1412	Head/Rear end	A stops for roadworkers,B collides from behind
1416	Head/Rear end	A reversing in B at entrance (Green Oaks)
1455	Accident with pedestrian	Pedestrian crossing road,collision
1456	Accident with fixed object, raher loose object	A sverves out for something in road,hits curb
1463	Sideswipe-same direction,rather accident with fixed object	A realises too late road closed,sverves to avoid obstructions and hits curb
1467	Head/Rear end	B accelarates to turn left,but suddenly stop. A hits B from behind

699	P in road	P 7 years old	100,naby Windmeul shop
700	B (male) negligent		100,indraai Olyfbos plaas
701	Scooter fault		MR00027xMR00189-near Klapmuts intersection
712	P in road		Regoor Windmeulplaas
838	Accident scene in road		Km 48.4
839	A lights faulty,vehicle not visible		Km 48.4?-Wiesenhof
840	B dangerous,negligent turn		60-Klapmuts AD Stores
841	Slippery road,rain		Km 47.3-oorkant lievland plaas
843	Animal in road	Sun in drivers eyes	MR00027xMR00205
844	A speeding	B turns too slowly (74years old)	Km 49.95
845	B negliggent		Km 24.55
846	B(unknown) negligent		Tussen Klapmuts&Sbosch, 4km van 4rigtingstop
853	A dives into dog on motorcycle		Tussen Simondium en Paarl, 100m van treinspoor-oorgang
887	Tyre burst (GVM>3500kg Isuzu 1984)		100,100m from Soetendal skool
1027	B (male) negligent		Tussen Klapmuts en paarl
1144	B(male) negligent	B only learners licence	Tussen Klapmuts&Sbosch,intersection Merchant street
1173	Animal in road	Early morning (03h30),from Germany	Km 47.3
1180	Other vehicle stationary in road		Intersection with Lynedoch road?
1182	Vehicle brakes fail		Intersection with Klippen plaas?
1184	B negligent	Wet road	60-paradyskloof+7/11
1328	Other vehicle negligent (unknown)		100
1383	A negligent/speeding	B dangerous crossing	DR01050xMR00027 Annandale
1388	A negligent		Km 40? Anandale defnitief
1391	P(work&stay@Nietvoorbij)liquor use suspected		Tussen Klapmuts&Sbosch,Nietvoorbij entrance
1394	Negligent cyclist		DR01050xMR00027 Annandale
1396	Road wet in areas,unlit road	3h00	Tussen Klapmuts&Sbosch,naby Kanonkop plaas
1401	B negligent, didn't see A's indicator		Km 42.5
1405	Oil on road lets B lose control	Rain	Km 8
1407	A negligent,should check B actually turning	B negligent,incorect indicator use	Km 31.2-Blaauklippen
1409	Unknown-no	Early morning (03h45)	28.2-Welgevonden Estate
1412	B negligent		Km 36.7
1416	A negligent		Km 38.5 Green Oaks
1455	P in road		Km 28.5
1456	Objects blowing off trucks,eg branches		Km 39.25
1463	A negligent,doesn't see road closed sign		Km 38.45 Green oaks exit
1467	B negliggent		Km 30.3-Tegnopark Road

1470	Approach at angle,both travel str	Intoxicated cyclist crosses road and hits car
1476	Sideswipe-same direction	A stationary,B passes A and hits A
1477	Accident with pedestrian	Group of P's exibiting themselves to motorists, gets infront of car
1481	Single vehicle overturned	A loses control and rolls
1486	Other (Accident with fixed object)	A loses control and hits railing
1487	Sideswipe-same direction	A drives straight,B suddenly turns in infront of A,collision
1488	Single vehicle overturned	A loses control and overturns
1490	Accident with fixed object,rather vehicle left road	A sverves out for P,rolls and leaves road
1497	Head on	B(trav S) overtakes another vehicle and hits A(trav N) head on
1498	Head/Rear end	A suddenly stops infront of B who is moving straight
1500	Unknown,rather sideswipe same direction	A stationary,B passes A and hits A
1501	Accident with fixed object	A sverved out for dog,collides with side of road
1505	Head/Rear end	Both vehicles sudden stop,A (behind B) loses control on wet road
1507	Head/Rear end	B reverses into moving traffic and hits A
1511	Head/Rear end	Another vehicle hits A from behind while traveling straight,A then hits forward in B
1513	Other,rather accident with fixed object	A overtakes B on right side who is turning right+sverves+hits a pole in process
1517	Head/Rear end	A busy turning right than B hits A from behind
1522	Approach at angle,both travel str	B enters road A is travelling straight on,collision
1526	Accident with fixed object	Vehicle A loses control and hits curb
1535	Accident with fixed object	Vehicle A hits curb
1537	Accident with pedestrian	A's mirror hits P
1547	Sideswipe-opposite direction	B overtakes another vehicle and hits A
1550	Sideswipe-same direction	A drives straight,B (infront of A)suddenly turns right,collision
1558	Accident with fixed object	B loses control and collides with concrete middleman
1617	Other,rather Other: Accident with loose object	Another unknown vehicle loses freight (stone&sand),it blows unto A
1648	Sideswipe-same direction	B waiting to turn right,A overtaking on right side,collision
1925	Head/Rear end	B turning right, A driving straight collides in B
1943	Sideswipe-same direction	B overtakes A on left,loses control,hits A in process
1944	Sideswipe-opposite direction	A crossing stop sign, other vehicle turns in infront of him
1959	Head/Rear end	A turning right, B driving straight collides in A
1961	Head/Rear end	Unknown
1975	Single vehicle overturned	A loses control and leaves road, overturns
2017	Turn left from wrong lane-rather sideswipe-same direction	A overtakes B and hits B in process
2022	Sideswipe-same direction	B overtakes A and hits A in process
2032	Sideswipe-same direction	B waiting to turn right,A passes on left,B doesn't turn and gets back to lane, hits A
2035	Single vehicle overturned	Vehicle in front of A suddenly brakes, A swerves to avoid other vehicle and lose control

1470	Intoxicated cyclist		Km 39.25
1476	B liquor/drug suspected/tested	B negligent	Km 27.6
1477	P's playing in road		Km 23.95
1481	A negligent		Km 26.1
1486	Sverving out for children in road		Km 39.3
1487	B negligent	B old-age (75 years)	Km 16.1
1488	A negligent	Early morning (03h00)	Km 30.3
1490	P in road		Km 30.3
1497	B negligent	Weather-rain	Km 42.9
1498	A negligent		Km 30.75
1500	B negligent		Km 24.65
1501	Animal in road (100m from Green Oaks turnoff)		Km 38.5
1505	Wet road	Weather-rain	Km 33.8
1507	B negligent		Km 25 Oorkant Mooiberge
1511	Other vehicle negligent		Km 38.55
1513	A negligent	B no indicator use	Km 18.05
1517	B negligent		Km 42.9
1522	B negligent		Km 23.4
1526	A negligent	Early morning (02h45)	Km 26.95
1535	A negligent		Km 38.45 Green oaks exit
1537	P crossing road		Km 38.45 Green oaks exit
1547	B negligent		100
1550	B negligent	B from England	Km 26.85
1558	B negligent	B no drivers licence	Km 27.6
1617	Other vehicle negligent(loses freight		Tussen Klapmuts&Sbosch
1648	A (male) negligent		100,N1 oprit,tussen Klapmuts+paarl
1925	A negligent, didn't see B's indicator		Km 23.05
1943	A negligent,dangerous overtaking		Km 49.3
1944	Other vehicle negligent		100
1959	B brakes fail (08 Vehicle)	B drives too fast	80/100?N1 afrit
1961	Unknown		Klapmuts 4way
1975	A negligent	A young driver (21 years) Late at night (00h05)	Km 47.3
2017	A negligent,dangerous overtaking	A old-age (81 years)	Km 50
2022	B dangerous,negligent overtaking		60
2032	B negligent	B no indiators on	100
2035	Vehicle before A suddenly brakes		Km 20.25

2035	Accident with pedestrian(1)	Pedestrian in road,collision
2037	Other, rather Other: Vehicle left road	A takes eyes off road and lose control and leaves road
2037	Head/Rear end	A(infront)+B(behind) travel straight,B collides from behind,A rolls off road
2040	Accident with animal	A drives into dog
2045	Accident with animal	A drives into dog
2045	Head/Rear end	Chain-accident at roadworks,unknown drives into A,A drives into B
2047	Single vehicle overturned (male) LDV Colt bakkie	Back left tyre burst,vehicle rolls off road
2048	Accident with pedestrian	A drives into P
2057	Sideswipe-same direction	A pulls off road and upon re-entering drives in front of B
2059	Other, rather Other: Vehicle left road	A falls asleep and drives off road)
2060	Single vehicle overturned	A travelling straight,left road+overturns
2063	Sideswipe-same direction	B waiting to turn right,A passes on left,B doesn't turn and gets back to lane, hits A
2069	Approach at angle-one or both turning (1),rather sideswipe-opposite direction	B+A travel opposite directions,B turns in infront of A+hits A
2070	Accident with pedestrian	A drives into P
2075	Sideswipe-opposite direction	A driving straight,B entering road and colliding
2079	Sideswipe-opposite direction rather same direction	A waiting to turn right,B passes on right and hits A
2080	Head/Rear end	B turning right, A driving straight collides in B
2082	Sideswipe same direction	B indicates to turn left,A passes on right,B suddenly moves right,colision
2089	Single vehicle overturned	A travelling straight,left front tyre burst
2098	Head/Rear end	Both A+B were turning right, A drives into B
2141	Sideswipe-same direction	A waiting to turn right,B passes and hits A
2149	Single vehicle overturned	A freight gets loose,A turns left and falls over
2165	Head/Rear end	C drives into A,who drives into B
2225	Other,rather accident with pedestrian	A drives into P
2245	Approach at angle,both travel str	A was crossing stop, B turning left, collission
2246	Head/Rear end	B exits into road, not seeing A
2509	Accident with pedestrian	B lets vehicle role over P's foot
2510	Head on	B exits into road, not seeing A
2512	Sideswipe-opposite direction	B+A collide
2584	Accident with animal	A drives into dog
2604	Unknown,rather accident with animal	Animal in road
2642	Head/Rear end	A turning right, B driving straight collides in A
2680	Sideswipe-opposite direction rather same direction	B overtakes A and hits A in process
2915	Accident with pedestrian	Pedestrian crossing road,collision
3047	Head on	A stationary at stop,other vehicle comes from opposite direction,collision
3064	Other,rather accident with fixed object	A swerves out for cyclists,hit bearing(reelings) on side

2035	P in road	Late at night (22H30)	Tussen Klapmuts+Wellington,1km v Anyswortelrug afrit,100,regoor 3hoekpla
2037	A negligent		100
2037	B (male) negligent *taxi*		100,naby vlakte stene,tussen Klapmuts+Wellington
2040	Animal in road	Late at night (00h05)	Km 47.3
2045	Animal in road		Km 49.45
2045	Other vehicle negligent (unknown)	Roadworks	60 by Durbanville afrit,tussen Klapmuts+Wellington
2047	Tyre burst (Colt bakkie)		60 naby Windmeul wynkelder,tussen Wellington+klapmuts
2048	P crossing road		60
2057	A negligent		Km 48.45
2059	A tired	Early morning (04h40)	100
2060	A negligent/tired	Late at night (00h35)	Km 49.9
2063	B negligent		Km 51.1?
2069	B (female) negligent		N1-afrit
2070	P crossing road		Km 48.5
2075	B negligent+misty weather	B no car/driver licence	Km 35.7
2079	B negligent		Km 42.2
2080	A negligent, didn't see B's indicator		60
2082	B(male) negligent		Klapmuts 4way
2089	Tyre burst	A Speeding	Km 48.85
2098	A negligent		Km 47.6
2141	B negligent		Km 46.25
2149	Load shifted on truck in turn		100
2165	C negligent,A forced frontward		60
2225	P running over road		Km 38.5
2245	A/B negligent		Km 48.65
2246	B negligent, accelerates too fast		Km 50.1
2509	B negligent		MR00027xMR00205
2510	B negligent, turns in before A		Km 47.6
2512	B negligent, in wrong lane/straddling lane		Km 47.3
2584	Animal in road		Km 50
2604	Animal in road		Tussen Klapmuts&Sbosch
2642	B negligent, drives too fast	A suddenly brakes to turn	MR00027xMR00205
2680	B negligent, dangerous overtaking		Km 47.55
2915	P in road		100,N1 oprit,tussen Klapmuts+paarl
3047	Other vehicle negligent (unknown)		4way Malmesbury/Wellington,60
3064	A(female) negligent/dangerous cycling		100,tussen Klapmuts en Stellenbosch,naby Wiesenhof draai

3065	Sideswipe-same direction	A overtakes B and hits B
3067	Head/Rear end	Other vehicle overtakes A and hits A in process
3070	Single vehicle overturned (male) Hyundai 130KS	A loses control because of bad road markings,rolls off road
3076	Other: rather Other: Vehicle left road	A swerves out for cow,vehicle leaves road
3078	Other,rather head/Rear end	A stops because vehicles before him stops,B collides from behind
3079	Turn right in face of oncoming traffic,rather sideswipe opposite direction	A turns right at stop,B drives from opposite direction into A
3132	Sideswipe-opposite direction	B+A travel opposite directions,B crosses centre line and hits A
3212	Approach at angle-both travel straight	A is stationary on R44,waiting to turn right.B comes off N1 offramp and can't stop soon enough,collision.B claims bra
3216	Head/Rear end	A waiting to turn right,B comes from behind,collision
3218	Head/Rear end	B puts on left indicator and makes U-turn to right,A collides from behind
3241	Accident with fixed object	Driver drives to Sbosch,vehicle in opposite direction drives in wrong lane, drives swerves and hits railing
3245	Sideswipe-opposite direction,rather Head/Rear end	Unknown-unclear
3247	Accident with fixed object	A touches side of road and loses control, into sandbank
3248	Sideswipe-opposite direction,rather approach at angle-both travelling straight	A travel straight on R44,B coming off N1 brakes fail,can't stop,collides into A
3251	Unknown,rather accident with fixed object	3km from N1 lights fail,vehicle swerves off road into pole
3252	Unknown,rather accident with fixed object	A overtakes truck,goes too far right in the road,lose control on gravel,leaves road on right side and hits pole
3256	Sideswipe-same direction	A waiting to turn right,B comes from behind and overtakes on right side,collision
3257	Unknown,rather sideswipe same direction	A waiting to turn right, B passes on right side, collision
3261	Head/Rear end	B swerves into A from behind
3263	Other: rather Other: Vehicle left road	A left front tire burst,vehicle leaves road
3265	Single vehicle overturned (male) Truck:Articulated multiple MAN	A swerves out for roadworks truck suddenly turning right infront of him,leaves road and falls over
3268	Sideswipe-opposite direction	A swerves(gly) on road into B,collision
3269	Single vehicle overturned (male) Light delivery vehicle Toyota	A swerves out for pedestrians,leaves road and falls over
3271	Unknown,rather Other: Vehicle left road	On turn A loses control and rolls off road
3278	Unknown,rather approach at angle,both traveling straight	A travel straight,B enters road,collision
3279	Reversing	A making U-turn to left,Craches into B who is reversing
3287	Sideswipe-opposite direction	B+A travel opposite directions,B crosses centre line and hits A
3477	Accident with fixed object	An oncoming vehicle forced A to swerve to side of road,where A hit a rock
3516	Single vehicle overturned (male)	A loses control,rolls off road
3605	Accident with animal	A drives into dog
3641	Other,rather Other: Vehicle left road	A overtakes another vehicle who stands still in road,and drives off road into ditch
3644	Head/Rear end	A makes sudden stop,B collides from behind
3646	Accident with pedestrian	Pedestrian crossing road,collision
3671	Sideswipe opposite direction+single vehicle overturned(female)	A loses control,hits B,rolls off road
3689	Accident with fixed object	A swerves out for dog and hits tree
3701	Sideswipe-opposite direction,rather sideswipe same direction	A overtakes B and hits B's caravan

3065	A(female) negligent		Tussen Klapmuts+Stellenbosch
3067	Other vehicle negligent (unknown)		100,by Durbanville afrit,tussen Klapmuts+Paarl
3070	A(male) lose control	Bad roadmarkings	60,tussen Wellington+Klapmuts
3076	Animal in road	Early morning (05h15)	100
3078	B (male) negligent		100,tussen Klapmuts+Wellington,naby 3hoekplaas
3079	B(unknown) negligent		Klapmuts 4way
3132	B (male) negligent		100,tussen Paarl+Wellington
3212	B (male) negligent		60,N1 afrit,tussen Klapmuts+Wellington
3216	B (male) negligent		100,tussen Klapmuts+Wellington,naby Anyswortelrug afrit
3218	B (male) negligent	B old-age (75 years)+from Germany	MR00027xMR00189-Klapmuts intersection
3241	Other vehicle negligent		3km v 4rigtingstop tussen Klapmuts+Sbosch
3245	Unknown/A(male)/ B(female) negligent		80,N1 oprit,tussen Klapmuts+Wellington
3247	A(male) lose control	A no drivers licence	3km v Suid Agter Paarl kruising,100km/h
3248	B brakes fail(mazda 323),tested to be true		40-60km/h N1 afrit
3251	A lights fail,(male) lose control		N1 afrit
3252	A(male) lose control/negligent		100,1km v Durbanville afrit,tussen Klapmuts+Wellington
3256	B (unknown) negligent		100,2.5km v N1,afrit na Vredebest plaas
3257	B(unknown) negligent		Tussen Klapmuts&Sbosch, 1km van 4rigtingstop
3261	B (male,Corolla) "gly"		Klapmuts 4way
3263	Tyre burst (Opel 1992)		80,1km v 4waystop
3265	Other vehicle negligent (unknown)		100,naby vlakte stene,tussen Klapmuts+Wellington
3268	A(male) lose control	Gravel road	60,Protea gravel road
3269	P in road		60,5km from SAPD Klapmuts,turnoff to gravel road
3271			Tussen Klapmuts+Wellington,naby Anyswortelrug afrit
3278	B (male) negligent		Tussen Wellington+Klapmuts,N1 Kaapstad oprit en Klapmuts/Sbosch afrit
3279	Unknown/A(male)/ B(male) negligent		60,Merchant straat/Kliniek
3287	B (male) negligent,driving over centre line		100,tussen Klapmuts+Wellington,naby 3hoekplaas
3477	Other vehicle negligent (unknown)		Olyfbosch Road,5m from Beaulah Farm
3516	A(male) lose control		80,tussen Klapmuts+Wellington,oorkant Boland Poultry
3605	Animal in road		100
3641	Other vehicle stationary in road		100m v interpale/interpace
3644	A(male) negligent		MR00027xMR00189-Klapmuts intersection
3646	P in road	P smells like alcohol	Meent se adraai
3671	A(female) lose control		Regoorkant Werda plaas
3689	Animal in road		80,drie-rigting
3701	A(male) negligent		Tussen Wellington+Klapmuts,60

3736	Sideswipe-opposite direction,rather Head/Rear end	B(infront)+A(behind) crosses stop,B makes U-turn,A collides from behind
3741	Accident with pedestrian (ped)	Pedestrian crossing road,collision
3749	Head/Rear end	A suddenly turns right,B swerves out and hits A
3757	Accident with fixed object	A loses control when splash through water and hits railing
3810	Sideswipe-same direction	A overtakes B,B suddenly turns right,collision
3843	Accident with fixed object	A swerves out for other vehicle,hits bridge
3879	Sideswipe-same direction	A overtakes B,collision
3891	Unknown,rather Sideswipe-same direction	Another vehicle hits A side mirror while passing
3895	Other,rather Other: Accident with loose object	A drives behind a truck,a wooden pole falls off truck, unto A
3896	Head/Rear end	B turning right,A comes from behind,collision
3897	Turn left from wrong lane,rather sideswipe same direction	B overtakes A and hits A in process
3910	Head/Rear end	A stationary at stop, B collides from behind
3936	Single vehicle overturned (male)	A loses control,rolls vehicle
3940	Other, rather Other: Vehicle left road	A loses control,swerves
3941	Sideswipe-same direction,rather turn right in face of oncoming traffic	B+A travel opposite directions,B turns right,collision
3946	Other, rather Other: Accident with loose object	A drives behind other vehicle,piece of freight falls off truck, unto A
3947	Head/Rear end	A waiting to turn right,B comes from behind,collision
3955	Head/Rear end	B(infront)+A(behind) collide,B makes sudden stop
3958	Head/Rear end	A stationary in yellow line with B in front of him,B reverses into A
4039	Sideswipe opposite direction,rather Head/Rear end	B+A travel opposite directions,collision
4107	Unknown,rather Sideswipe-opposite direction	A travel straight,B enters road too widely in opposite direction and collides with A
4154	Head/Rear end	A reduces speed for tractor crossing road, B collides from behind
4158	Approach at angle,both travel straight	A doesn't se stop,collides with B
4274	Accident with fixed object	A falls asleep and drives off road into object
4275	Other, rather Other: Vehicle left road	A lights fails and drives off road into ditch
4280	Single vehicle overturned (male)	Sleepwa se rek het gebreek,beheer oor voertuig verloor,omgeslaan
4282	Single vehicle overturned (male)	Tractor turns too fast into farmroad,falls over unto 1year-old
4290	Accident with pedestrian	Pedestrian crossing road,collision
4319	Head/Rear end	Vehicle before A brakes,A brakes,B collides from behind
4329	Other, rather Other: Vehicle left road	Truck+A travel opposite directions,truck passes anther vehicle and as it passes A blinds A because of headlights,A is
4332	Other, rather Other: Vehicle left road	A swerves out for dog,leaves road
4360	Other,rather sideswipe,same direction	A wating to turn right, B brakes fail and tries to pass A,but hits A
4367	Turn right in face of oncoming traffic	A travel straight,B enters road and collides with A
4378	Turn left from wrong lane	Unknown-unclear
4401	Sideswipe opposite direction	B+A travel opposite directions,B overtake another vehicle,collision
4404	Accident with animal	A hits dog running over road

3736	B (male) negligent,dangerous maneuvering		4way,60
3741	P in road		80,naby Agter-Paarl Koelkamer,tussen Wellington+Sbosch
3749	A(male) negligent		Tussen Wellington+Klapmuts,60,naby Varece plaas,2way
3757	Wet road		Tussen Wellington+Klapmuts,100
3810	B (unknown) negligent		4way,80,tussen Paarl+Wellington
3843	Unknown/other vehicle/A(male)/ negligent		Unknown node
3879	A(male)/ B negligent		Km 29.75 Western Taning
3891	Other unknown vehicle negligent		
3895	Truck A (male) negligent,lets freight come loose		Tussen Wellington+Hernon,60
3896	Unclear/A(female)/ B(male) negligent		100
3897	B (male) negligent		Km 31.2
3910	B brakes fail (Mbenz 1977)		Klapmuts 4way
3936	Unknown (GVM>3500kg isuzu 1996)		Verby intersection Durbanville R312 afrit,tusssen Wellington en Klapmuts
3940	A(male),loses control on bumpy,roadworks road negligent		Tussen Wellington en klapmuts,naby R44 Suid Agter Paarl kruising,100
3941	B (female) negligent		Tussen Wellington en klapmuts,by Klapmuts afrit,100
3946	Other vehicle negligent,lets freight come loose		Tussen Klapmuts+Wellington,1km v N1 brug,100
3947	B (female) negligent	B old-age (66 years)	Tussen Klapmuts en Stellenbosch Km 51.8?,3.5km v 4rigtingstop
3955	B (male) negligent		Tussen Wellington en Klapmuts,100km/h
3958	B (male) negligent reversing	A (male)stationary in yellow line	Tussen Wellington en Klapmuts,100km/h,oorkant Paarl Diamantplaas
4039	Unkown/Unclear A(male)/B(female) negligent	B no driver licence	Tussen Wellington en Klapmuts,100km/h,R44 agterPaarlpad
4107	B (male) negligent		Km 35.4
4154	Tractor crossing road dangerously	B(male) drives too close to A	Tussen Wellington en Klapmuts,60km/h,0.8km v N1
4158	A(male) negligent	Stop sign concealed	Klapmuts 4way
4274	A tired	Early morning (01h30)	2m vanaf Nelson's Creek Plaas
4275	A lights fail	Late at night (23H00)	Tussen Paarl en Klapmuts,unknown node
4280	Rek gebreek?Truck:Articulated MAN 30300		Tussen Paarl en Klapmuts
4282	A (male) negligent,turns too fast		Tussen Paarl en Klapmuts,Valencia Plaas inrit
4290	P in road		Tussen Wellington en Paarl,100km/h
4319	Unknown		Tussen Wellington en Paarl,100km/h
4329	Other vehicle negligent,has brights on		Tussen Klapmuts en Paarl,100
4332	Animal in road		Tussen Klapmuts en Paarl
4360	B brakes fail(mazda 323)	B Congo refugee	Tussen Wellington en Paarl,intersetion R44/R45,60km/h
4367	B negligent (CJ 17473 rooi Mazda)	B runs away!!	100,tussen Malmesbury en Paarl
4378	A/B (both male) negligent	Early morning (04h30)	Km 26.1
4401	B(male) negligent overtaking-/<125cc motorcycle		Tussen Wellington en Paarl,afdraai na Ongegund Plaas,120!!km/h
4404	Animal in road		Tussen Wellington en Paarl,begin v dubbel ryvlak,120!!km/h

4415	Other, rather Other: Vehicle left road	A faints and vehicle leaves road
4425	Sideswipe opposite direction,rather Sideswipe same direction	A waits in yellow line to turn right,doesn't wait long enough to let B pass, collides with B when re-entering road
4432	Sideswipe opposite direction,rather Head/Rear end	A(infront)+B(behind) collide
4435	Approach at angle-one or both turning,rather sideswipe-same direction	B waiting to turn right,A overtaking on right side,collision
4454	Other,rather approach at angle-both travel straight	A enters road B is travelling straight on,collision
4489	Head/Rear end	A(infront)+B(behind) collide
4522	Head/Rear end	Chain-accident,A drives into B,C drives into A
4536	Accident with fixed object	A avoids pedestrian and hits roadside
4573	Accident with pedestrian,rather accident with fixed object	A avoids pedestrian and hits railings on side
4585	Other,rather Other: Accident with cyclist	A drives in yellow line and hits cyclist
4589	Head/Rear end	B makes sudden stop,A collides from behind
4603	Turn right in face of oncoming traffic	B+A travel opposite directions,B turns right in front of A travelling straight,collision
4609	Accident with fixed object,rather loose	A drives behind truck,piece of steel falls off truck, unto A
4626	Sideswipe opposite direction	B(trav E)+A(trav S),B doesn't stop at stop where A is travelling straight,collision
4627	Head/Rear end	B indicated to turn right and moved to right,but then suddenly moved to left again,A collides from behind
4672	Other, rather Other: Vehicle left road	A swerves out for truck,leaves road,ends in trench
4680	Head/Rear end,rather turn right in face of uncoming traffic	A travelling straight,B enters road,collision
4681	Head on (5)	B+A travel opposite directions,B turns right to Vlakte stene in front of A,collision
4737	Sideswipe-opposite direction,rather same direction	A waiting to turn right,B overtakes anther vehicle behind A and collides with A
4744	Head/Rear end	B(tractor) wating to turn right,hit from behind by A
4757	Other, rather Sideswipe: same direction	Vehicle with trailor(A) jack-knifed and forced B unto the centre median
4831	Head/Rear end	A makes sudden stop,B collides from behind
4961	Head/Rear end	A waits to turn right,B comes from behind and collides
4973	Head/Rear end	B waits to turn left,A comes from behind and collides
4977	Other,rather single vehicle overturned(male)	A travelling straight,tyre burst,rolls
5001	Head/Rear end	A(infront)+B(behind) collide
5012	Head/Rear end	A(infront)+B(behind) collide
5030	Head/Rear end	B waiting to turn right,A comes from behind,collision
5033	Head/Rear end	A stop by 'n ry-stop teken.B kom v agter en bots
5034	Single vehicle overturned (male)	A turns right+overturns
5037	Approach at angle-both travel straight	B doesn't see A when crossing stop,collision
5048	Single vehicle overturned (male)	A making U-turn,wheel slips on downgrade,overturns
5054	Sideswipe opposite direction	B(travel N)+A(trav S),B turns right to enter new road(2001 28/9) and hits A
5058	Turn left from wrong lane	A turning left at stop,B overtakes to also turn left and collides
5062	Head/Rear end	B(behind)+A(infront) both travel straight,collide
5063	Unknown,rather head-on	B+A travel opposite directions,A collides with B

4415	A(male GVM>3500kg isuzu) faints	A tired	100,naby Paarl,travel West
4425	A(male) negligent		DR01084xMR00027,Knorhoek afdraai
4432	B (unknown) negligent		MR00027xMR00189-Klapmuts intersection
4435	A(male) negligent		Tussen Klapmuts en Paarl,1km v Mooikelder road,60km/h
4454	Unknown/A(male)/ B(female) negligent		Intersection Voorpaardeberg
4489	B (male) negligent		R44 Agter Paarl Pad,intersection Durbanville R312 afrit,tusssen Wellington
4522	A(female) negligent		Tussen Wellington en Paarl,15km v Wellington,120!!km/h
4536	P in road		Tussen Wellington en klapmuts
4573	P in road		Unknown node; Tussen Wellington en klapmuts
4585	A(female) negligent,drive in yellow line		Tussen Klapmuts en Paarl-N
4589	B stops for red vlag,nuwe pad		100,regoor vlakte stene,tussen Klapmuts+Wellington
4603	B (female) negligent		Tussen Klapmuts+Wellington,intersection oprit na N1,60
4609	Other vehicle negligent,lets freight come loose		Tussen Wellington en Paarl
4626	B (male) negligent		Durbanville kruising met R44,tusssen Wellington+Klapmuts
4627	B (male) negligent infront		Unknown node
4672	Unknown		100,naby vlakte stene,tussen Klapmuts+Wellington
4680	B (male) negligent		Km 48.15?,outside AD Stores
4681	B (unknown) negligent	Early morning (05h30)	100,regoor vlakte stene,tussen Klapmuts+Wellington
4737	B(male) negligent		MR00027xMR00172 Helshoogte
4744	A(male) negligent		100-naby padstal
4757	Unknown		R44 se brug tussen Klapmuts en Paarl-120?
4831	A(female) negligent		100
4961	B(male) negligent		Km 50.75; 4-rigting stop Klapmuts
4973	A(male) negligent		Tussen Klapmuts+Paarl,op R44 by N1 afrit
4977	A vehicle tire burst(Mazda LDV 2002)	Early morning (05h30)	Agter Paarl,intersection R44-Windmeul
5001	B (male) negligent		MR00027xMR00189-Klapmuts intersection
5012	B (unknown) negligent,apparently bending down to answer phone		MR00027xMR00201? Defnitief 4-rigting stop Klapmuts
5030	A(male) negligent		Tussen Klapmuts+Wellington,intersection oprit na N1,60
5033	B (male) negligent	B old-age (74 years)	R44 Agter Paarl Pad,5km v Durbanville R312 afrit,tusssen Wellington+Klapm
5034	Unknown		N1 offramp tussen Klapmuts+paarl
5037	B(male) negligent	Rain,dusk	Klapmuts 4way
5048	Unknown		Intersection with Anywortelrugpad tussen Klapmuts+Wellington,100
5054	B (male) negligent		ongeveer 1km v Renosterplaas tussen Wellington+Klapmuts,40km/h
5058	B (unknown) negligent,dangerous		MR00027xMR00189-Klapmuts intersection
5062	B brakes fail		MR00027xMR00189-Klapmuts intersection
5063	A(male) in wrong lane,negligent		3km v 4-rigting stop Klapmuts

5064	Accident with fixed object	A looses control,swerves,land in sloot
5067	Accident with pedestrian (Monday)	A looses control and collides with P on left side of road
5069	Other, rather Other: Vehicle left road	A tire burst and leaves road
5081	Other, rather Other: Vehicle left road	A brakes,lose control,leaves road into stormwatersloot
5091	Sideswipe-same direction,rather approach at angle-both travel straight	A enters road B is travelling straight on,collision
5093	Sideswipe-opposite direction	B+A travel opposite directions,B swerves into A,both leave road
5094	Head/Rear end	B waits behind another vehicle turning right,B wants to continue trav straight,A comes from behind and collides
5099	Sideswipe-same direction	B overtakes A and hits A(tractor) in process
5118	Single vehicle overturned(male)	A turning right,"bak het afgegly",overturns
5127	Accident with pedstrian	P crossing road
5133	Turn right in face of oncoming traffic	B+A travel opposite directions,B turns right in front of A,collision
5142	Accident with fixed object	A swerves out for sheep and hits sandwal
5447	Single vehicle overturned(female)	A overturns
5452	Accident with pedestrian (Sunday)	P jumps in front of A(trv N),gets hits and falls in front of B(trv S),collision
5456	Sideswipe-same direction	B overtakes A and hits A in process
5472	Accident with pedestrian (Friday)	Pedestrian crossing road,collision
5476	Sideswipe-opposite direction	A turns right at stop,B drives out of turn over stop into A
5481	Approach at angle,both travel str	Unknown-unclear
5482	Head/Rear end	A vehicle brakes down and pulls off road,B collides from behind
5486	Sideswipe-same direction	A turning right into road where B is driving straight,collision
5500	Approach at angle,both travel str	B didn't stop at stop street,B+A collide
5503	Accident with fixed object	Apparent brake failure
5507	Head/Rear end	A(infront)+B(behind),unclear cause,collision
5508	Approach at angle-both travel straight	A enters road B is travelling straight on,collision
5511	Head/Rear end	B(infront)+A(behind) collide
5616	Unknown,rather sideswipe same direction	A waiting to turn right, B passes on right side, collision
5617	Unknown,rather accident with pedestrian	Car hits cyclist
5619	Sideswipe-opposite direction	Unknown
5620	Head/Rear end	A(infront)+B(behind),A accelerates and brakes whole time,A suddenly brakes again,collision
5621	Head on (2)	B+A travel opposite directions,A overtake another vehicle,collision
5623	Head/Rear end	A intending to pass another vehicle,cannot,has to move back into lane,collides with B
5625	Head/Rear end	A enters road B is travelling straight on,collision
5627	Sideswipe-same direction	A turning right, B travelling straight,collision
5631	Sideswipe-same direction	A turning right, B overtaking on right side,collision
5639	Accident with pedestrian (Wednesday)	A drives in yellow line to let other vehicle pass,hit P hand
5642	Sideswipe-same direction	B overtakes A and hits A in process

5064	A(male),loses control on wet,bumpy,pothole,roadworks road neg	Early morning (02h00)	60-Vlakte bricks
5067	A looses control (steering wheel locks)		60-50m v Ou Hoofweg
5069	A vehicle tire burst(Opel Astra 95)		80/100?N1 afrit
5081	A(female) brakes,loose control,negligence?		Proteapad naby 80/100?N1 afrit
5091	A (male) negligent		Intersection Suid Agter Paarl pad
5093	Unsure,B(male) swerves-negligence?		80/100?N1 afrit
5094	A(male) negligent		R44 R312 aansluiting
5099	B negligent,unknown CJ-58491		Intersection Suid-Agter Paarlpad
5118	A vehicle "bak afgegly"		51.8? N1 afrit defnitief
5127	P crossing road		Tussen Klapmuts+Sbosch (regoor "Jabieres Superette"
5133	B(male) negligent,dangerous right-turn		51.8? N1 afrit defnitief
5142	Animal (sheep) in road???	Early morning (01h30)	Km 51.8; 4-rigting stop Klapmuts
5447	Unknown		100
5452	P in road		Km 51.8
5456	B negligent,unknown male		Km 51.8; 4-rigting stop Klapmuts
5472	P in road	P 9 years old	Km 50.8-Sand straat
5476	B negligent	B old-age (77 years)	Km 51.75-intersection Ou Paarl Rd (MR189)
5481	A/B negligent		100
5482	B negligent,didn't see A danger light	Early morning (04h00)	Km 50-Ppantry
5486	A misjudges distance,negligent		100
5500	B dangerous driving,negligent don't stop at stop		Km 50.8; 4-rigting stop Klapmuts
5503	Vehicle brakes fail	Early morning (05h30)	90-naby N1 brug
5507	Unknown/Unclear A/B(both male) negligent		80/100?N1 afrit
5508	Unknown/A(male)/ B(male) negligent		Intersection Suid Agter Paarl pad
5511	A negligent,didn't see B	Early morning (03h50)	100
5616	B(unknown) negligent		Tussen Klapmuts&Sbosch,by "Klapmutszigh"?51.8km
5617	Driver/Cyclist negligent		Klapmuts 4way
5619	A/B negligent		Km 50.35
5620	A dangerous driving		Km 47.3-oorkant lievland plaas
5621	B negligent,dangerous overtaking		100
5623	A negligent,dangerous overtaking		100
5625	A(male)/B(unknown) negligent		100,AgterPaarlpad,kom uit grondpad
5627	B negligent		Km 39.1
5631	B negligent,dangerous overtaking	Late at night (00h00)	Km 50-Ppantry
5639	A (male) negligent		100
5642	B negligent,chases away!		Km 44.8-Uitkyk plaas

5646	Accident with pedestrian (Friday)	Pedestrian crossing road,collision
5647	Head on	B+A travel opposite directions,B overtake another vehicle,collision
5656	Sideswipe-opposite direction,rather approach at angle,both travel straight	B enters road A is travelling straight on,collision
5676	Reversing	B reversed into A
6779	Approach at angle-one or both turning	A turns right out of Kromme Rhee unto R44,collides with B travelling straight
6784	Head/Rear end	A stationary at traffic light,B comes from behind and collides
6790	Sideswipe-same direction	A turning left,B tries to overtake on left side,collision
6817	Head/Rear end	A(behind-right lane)+B(front-left lane) travel straight,B moves to right lane,infront of A,collision
6829	Head/Rear end	A vehicle problems,pulls off road,park with hazards on, B comes from behind+collides
6857	Turn left from wrong lane,rather turn right in face of oncoming traffic	B+A travel opposite directions,B turns right in front of A travelling straight,collision
6865	Head/Rear end	Unknown-unclear
6874	Single vehicle overturned (male) Nissan car	A loses control when other vehicle turns in infront of him,rolls off road
6878	Other, rather Other: Vehicle left road	A loses control on turn and hits side grondwal
6894	Approach at angle-both travel straight,rather sideswipe opposite direction	A turns left into road were B is stationary,collision
6896	Approach at angle-both travel straight	A moves to right side of road and collides with embankment,falls on side,B+C comes from opposite direction and coll
6904	Accident with pedestrian	A jumps off lorry turning right unto A,collision of A and lorry too
6915	Head/Rear end	B(infront),A(behind) collides at stopstreet
6965	Sideswipe-opposite direction	No detail given
6967	Head/Rear end	A(infront),B(behind) collides when light hits green
6969	Head/Rear end	A(infront) brakes fot robot,B(behind) also brakes,but skids into A
6979	Turn right in face of oncoming traffic	A enters R44,collides into B
6992	Head/Rear end	A(infront),B(behind) collides
6999	Accident with fixed object	A(male) lose control and hits brickwall on side of road
7000	Sideswipe-opposite direction	A rolls off road(Nissan car) into opposite,incoming traffic B
7035	Head/Rear end	A(infront),B(behind) collides
7052	Single vehicle overturned (female) VW Volksie	A tire burst and rolls off road
7099	Accident with fixed object	No detail given,except A was swerving
7104	Accident with pedestrian(1)	Pedestrian crossing road,collision
7119	Accident with pedestrian	Pedestrian crossing road,collision
7130	Sideswipe-same direction	B waiting to turn right,A comes from behind,collision
7146	Accident with pedestrian	Pedestrian walking infront of car,collision
7149	Head/Rear end	B enters R44,but suddenly stops,A collides from behind on T-road
7155	Unknown,rather Head/Rear end	A can't stop soon enough coming over bridge,collides into B standing at back of queue
7156	Other,rather accident with fixed object	A loses control and hits railing
7157	Sideswipe-same direction,rather sideswipe-opposite direction	B+A travel opposite directions,both overtaking other vehicles,collision
7159	Sideswipe-same direction	A travelling straight,B comes off N1 and collides with A

5646	P in road	P 4 years old	Km 50.8-Klapmuts bruggie
5647	B negligent,dangerous overtaking		Km 48.1-uitspan plaas
5656	A negligent	A fom America	Km 47.7-Le Bonheur Farm
5676	B(unknown) negligent		MR00027xMR00205? Defnitief Intersection with R45
6779	A (male) negligent		DR01085xMR00027,Between Klapmuts+Sbosch,intersection Kromme Rhee
6784	B (female) negligent		DR01012xMR00027xMR00113,Cloetesville/Green Oaks traffic lights
6790	B (female) negligent	B from Zimbabwe	100,Between Klapmuts+Sbosch,near Kromme Rhee Rd+Delheim Rd,entran
6817	B (male) negligent,dangerous lane changing		100,tussen Somerset-Wes+Stellenbosch,80m v Avontuur Winefarm
6829	B(unknown) negligent,doesn't see A hazards	B speeding?	0.8?,tussen Klapmuts+Stellenbosch,oorkant Morgenplaas arbeidershuise
6857	B (male) negligent		100,Jamestown intersection
6865	Unknown/A(male)/ B(male) negligent		100,tussen Klapmuts+Stellenbosch
6874	A over alcohol limit (0215)	Other vehicle negligent	100,tussen Somerset-Wes+Stellenbosch,100m v Mooiberge
6878	A(male) loses control	Late at night (23H45)	Tussen Klapmuts+Stellenbosch,oorkant Timberlea plaas
6894	A (male) negligent,turns too fast	Late at night (22H50)	60,Jamestown intersection
6896	A (male) negligent	Early morning (05h00)	??Koelenhof rd 100m from Lindelani entrance?R44?
6904	P jumping off lorry negligently		80,Intersection with Knorhoek pad and Slaley Farm
6915	A (male) negligent	Early morning (01h45)+A from Switzerland	80,Intersection with Knorhoek pad and Slaley Farm
6965	Unknown/A(male)/ B(male) negligent		80,Welgelegen suburb,intersection Welgevonden?
6967	B (male) negligent		60,between Swest+Sbosch,Jamestown robots
6969	A (male) negligent		60,between Swest+Sbosch,Jamestown robots
6979	A (male) negligent/dangerous entering road	A old-age (67 years)	DR01085xMR00027,Between Klapmuts+Sbosch,intersection Kromme Rhee
6992	Unknown/A(female)/ B(male) negligent		80,between Swest+Sbosch,Technopark turnoff
6999	A(male) lose control	Early morning (00h25)	100,between Swest+Sbosch,100m from Jamestown turnoff
7000	A(male) lose control and rolls off road	Early morning (01h03)	60,between Swest+Sbosch,300m from Paradyskloof robots
7035	B (male) negligent,brakes too late too fast		60,between Swest+Sbosch,Jamestown robots
7052	A vehicle tire burst(VW Volksie)	Early morning (03h00)	DR01050xMR00027,intersection with Anandale Rd
7099	A (male) negligent???	Early morning (00h45)	60,intersection with Lang+First
7104	P in road		DR1084xMR00027
7119	Unclear/A(female) no warninghoot when P still far-negligent driving/P in road		80,Cloetesville/Green Oaks at Timberlea Farm
7130	A (female) negligent		DR1085xMR00027 Kromme Rhee intersection
7146	P in road	Late at night (23H35)	Between Stellenbosch+Klapmuts,at Morgenhof
7149	B (male) negligent		60,between Swest+Sbosch,Technopark entrance
7155	A (female) negligent		60,Between Klapmuts+Sbosch,near Ou Hoofweg
7156	A(male) lose control	Early morning (00h10)	60,Between Klapmuts+Sbosch,near trainbridge
7157	A(male)/ B(male)/both negligent		60,100m from Klapmuts 4rigtingstop
7159	Unknown/A(male)/ B(male) negligent		MR00027xMR00205?defnitief intersection with N1

7160	Single vehicle overturned (male) Opel Monza	Unknown
7174	Single vehicle overturned (male) Isuzu 1998 LDV	
7186	Other,rather sideswipe opposite direction	A+other vehicle travel opposite direction,other vehicle collides with A despite hooting and speeds away
7191	Other,rather accident with fixed object	A wants to turn right and collides with roadsign
7192	Sideswipe-same direction	A waiting to turn right,B overtaking on right side,collision
7196	Sideswipe-same direction	A waiting to turn right,B overtaking on right side,collision
7196	Approach at angle-one or both turning	B makes U-turn and collides with A travelling straight
7204	Head/Rear end	A(infront)+B(behind) travel straight,B brakes for something(?) and skids into A,collision
7223	Unknown, raher single vehicle overturned	'Die trok(Hino GVM>3500kg) se dryfas het vd oppervlakte gelig en die voertuig het op sy sy te lande gekom"
7230	Other,rather sideswipe same direction	A overtakes B,hits gravel on right side,swerves back to hit B and skid out of control to end in ditch
7238	Accident with animal	A drives into dog
7239	Approach at angle-both travel straight	Left lane R44 congested,other vehicle gives B opportunity to exit Tpark,A overtakes in right lane of R44 and collides v
7252	Head/Rear end	A+B travel trough roadblock,A stops and B collides from behind
7254	Sideswipe-opposite direction	A+other vehicle travel opposite direction,other vehicle collides with A and speeds away
7270	Other,rather accident with fixed object	A travel straight,collides with stone in road
7288	Head/Rear end	A parked,B enters traffic flow and collides
7319	Approach at angle-one or both turning,rather sideswipe-same direction	A(right lane)+B(left lane) travel in same direction,B suddenly cahnges lane,bumps A,A rolls off road
7334	Single vehicle overturned (male) Mazda car 1993	Back left tyre burst,vehicle leaves road and rolls over
7338	Head/Rear end	B waiting to turn right,A overtaking on right side,collision
7345	Unknown,rather Head/Rear end	Other vehicle parked,A comes from behind and collides
7349	Accident with pedestrian	Pedestrian running infront of car,collision
7360	Sideswipe-opposite direction	B turning right into Winery road,collides with A travelling straight
7361	Sideswipe-same direction	Unclear
7373	Accident with pedestrian(1)	P crossing road
7377	Sideswipe-opposite direction	A crosses R44,collides with B travelling straight
7392	Accident with animal	A drives into rabbit
7405	Head/Rear end	Coming from Paradyskloof,the right lane was closed.A waiting to turn right at Tpark,B comes out of closed right lane
7420	Unknown,rather sideswipe same direction	A turns right without indicator,B collides from behind
7426	Head/Rear end	B slowing down for robot ahead,A couldn't slow down fast enough,collision
7451	Unknown,rather vehicle left road	A vehicle ends in water channel
7476	Head/Rear end	B stalls when light is green,A collides from behind
7526	Single vehicle overturned (male) Mazda car	A left front tire burst and lose control
7540	Head/Rear end	B stationary,A comes from behind and collides
7558	Approach at angle-one or both turning	A makes "3puntdraai",collides with B travelling straight
7560	Head/Rear end	A collides from behind into another vehicle at stop
7569	Accident with pedestrian(1)	P crossing road

7160	Unknown	Early morning (03h40)	4rigting kruising/**intersection with N1**
7174	A(male) lose control and rolls off road	Early morning (05h30)	Between Swest+Sbosch,across Airstrip
7186	Other vehicle negligent (unknown CBY2147 VWBakkie),dangerous driving		Between Klapmuts+Sbosch,near Nasilu shop
7191	A (male) negligent	Late at night (23H30)	60,tussen Somerset-Wes+Stellenbosch,at airlanding strip
7192	B (male) negligent,dangerous overtaking	B liquor/drug suspected/tested	DR1085xMR00027 Kromme Rhee intersection
7196	B (male) negligent,dangerous overtaking		DR01090xMR00027,tussen Klapmuts+Stellenbosch,Elsenburg/Muldersvlei a
7196	B (male) negligent,dangerous U-turn	B from Germany	100,Between Klapmuts+Sbosch
7204	B (unknown) negligent/lose control		80,tussen Stellenbosch+Somerset-Wes,Graveyard entrance 2 exit
7223	Voertuig ry in geel streep		DR01090xMR00027,tussen Klapmuts+Stellenbosch,Elsenburg/Muldersvlei a
7230	A (female) negligent		60,tussen Stellenbosch+Somerset-Wes,between Technopark+Paradyskloof
7238	Animal in road		100,Welgevonden suburb
7239	B (male) negligent entering traffic flow		80,tussen Stellenbosch+Somerset-Wes,Technopark
7252	Unknown/A(male)/ B(male) negligent		60,by Cloetesville
7254	Other vehicle negligent (unknown)		80, tussen Sbosch+Paarl
7270	Stone in road		80,tussen Stellenbosch+Somerset-Wes
7288	B (female) negligent	Other vehicle dangerously parked	60,tussen SBosch+S-Wes,Moutainbreeze entrance
7319	B (male) negligent,dangerous lane changing		80,tussen Stellenbosch+Somerset-Wes,Rathby rd
7334	Tyre burst (Mazda 1993 car)	Late at night (22H20)	DR01090xMR00027,tussen Klapmuts+Stellenbosch,Elsenburg/Muldersvlei a
7338	B (male) negligent		100,tussen Stellenbosch+Klapmuts,by Morgenhof
7345	A (male) negligent	Other vehicle dangerously parked	Klapmutspad
7349	P in road		Klapmutspad
7360	B(unknown) negligent	A speeding?/B from Germany	Intersection Winery road
7361	Unknown/A(male)/ B(male)/other vehicle negligent		100,Between Klapmuts+Sbosch,1.5km from 4waystop
7373	P in road		100,Between Klapmuts+Sbosch,entrance LaVemine farm,4km from Sbosch
7377	A (male) negligent,doesn't see B	B speeding?	80,intersection with Anandale Rd
7392	Animal in road	Early morning (01h30)	100,Between Klapmuts+Sbosch,intersection Muldersvlei
7405	B (male) negligent,dangerous driving		80,between Swest+Sbosch,Technopark turnoff
7420	A (male) negligent		Cloetesville,Green Oaks traffic lights
7426	A (female) negligent		60,between Swest+Sbosch,Jamestown robots
7451	Unknown/A (female) negligent		Water channel?
7476	A (male) negligent		60,between Swest+Sbosch,Jamestown robots
7526	A left front tire burst(Mazda car)		Intersection Winery road
7540	A (female) negligent	Road very slippery(rain)	60,between Swest+Sbosch,Jamestown robots
7558	A (male) negligent		60,Between Stellenbosch+Klapmuts,at Morgenhof
7560	A (male) negligent		?? Stop,"afdraai na Kaapstad"?Klapmutskant
7569	P in road	P 7 years old	100,between Klapmuts+Sbosch,Bloemerf Farm

7571	Single vehicle overturned (male) Opel car	Other vehicle drives in front of A,A must swerve to avoid accident,car overturns
7572	Single vehicle overturned (female) VW Golf	A loses control and rolls off road
7575	Sideswipe-same direction	B overtaking A,A suddenly turns right,collision
7587	Accident with fixed object,rather vehicle leave road	A loses control,leaves road,ends in ditch
7616	Head/Rear end	B stationary,A comes from behind and collides
7641	Head/Rear end	B waiting to turn right,A comes from behind,collision
7644	Turn right in face of oncoming traffic	B turns right into R44 A is travelling on,collision
7648	Other, rather Other: Accident with cyclist	Passenger of A opens door in drive,hits cyclist
7666	Accident with animal	A drives into dog
7690	Accident with pedestrian	P crossing road
7731	Sideswipe-same direction	B parked behind A.When B pulls away,scrathes A.
7751	Sideswipe-opposite direction	B+A travel opposite directions,B crosses yellow line,collision
7752	Accident with animal	A drives into dog
7757	Sideswipe-opposite direction	Unclear
7762	Head/Rear end	A stationary at traffic light,B comes from behind and collides
7810	Turn right in face of oncoming traffic	A moves to right lane, in front of B,collision
7818	Accident with fixed object	A knocked over concrete struvture;cornerstones of entrance
7861	Sideswipe-same direction	A waiting to turn right,other vehicle overtaking on right side,collision
7869	Head/Rear end	A stationary,B comes from behind and collides
7876	Head/Rear end	B stationary,A comes from behind and collides
7981	Sideswipe-opposite direction,rather same direction	A drives straight on R44,B jumps robot turning right out of Jamestown,collision
7986	Accident with animal	A drives into dog
8006	Sideswipe-same direction	B waiting to turn right,C drives on shoulder,A swerves to avoid B and hit C+B
8013	Sideswipe-same direction	A swerves to avoid accident with other vehivle,turning into R44 from Annandale road,hits B
8051	Accident with animal	A drives into buck!
8057	Accident with animal	A drives into "wildsbok"
8091	Accident with animal	A drives into animal
8099	Sideswipe-opposite direction	B+A travel opposite directions,collision
8112	Accident with animal	A drives into buck!
8136	Turn right from wrong lane	Unclear
8148	Head/Rear end	A slowing down for robot ahead,B couldn't slow down fast enough,collision
8153	Turn left from wrong lane,rather sideswipe same direction	B overtakes A and hits A in process
8155	Head/Rear end	A stationary,other vehicle comes from behind and collides
8160	Head/Rear end	B parked,vehicle infront of A turns right to Morgenhoff,A moves to left and collides with B
8188	Single vehicle overturned (male) VW Golf	A overtakes another vehicle,lose control,and leaves road
8197	Head/Rear end	B(infront),A(behind) collides when B suddenly brakes and turns right

7571	Other vehicle negligent		100,Eikendal entrance
7572	A(female) lose control		100,between Swest+Sbosch
7575	A (male) negligent		?? Between Klapmuts+Sbosch,Mitres Edge entrance
7587	A(male) lose control	Late at night (22H15)	100,entrance Snowball Farm
7616	A (female) negligent		80,between Swest+Sbosch,Technopark turnoff
7641	B (male) negligent	B no drivers licence	Between Klapmuts+Sbosch,intersection N1
7644	B (male) negligent	Sight distance?	DR01084xMR00027?,Between Klapmuts+Sbosch,Kanonkop entrance
7648	A (unknown) negligent	Early morning (00h00)	60,between Klapmuts+Sbosch,Nietvoorbij Farm
7666	Animal in road		Between Swest+Sbosch,+-1km from Jamestown robots
7690	P in road		60,between Swest+Sbosch,Jamestown robots
7731	B (male) negligent	B from Spain	100,between Swest+Sbosch
7751	B (male) negligent		80,between Klapmuts+Sbosch,entrance Laibach farm
7752	Animal in road		Cloetesville,400m from Green Oaks traffic lights
7757	Unknown/A(male)/ B(male) negligent		100,between Swest+Sbosch,La Pineta Restaurant
7762	B (male) negligent		60,between Klapmuts+Sbosch,intersection Welgevonden indraai
7810	Unknown/A(female)/ B(female) negligent		80,between Swest+Sbosch,Mooiberge entrance
7818	A (male) falls asleep,witness says high speed	Liquor use suspected	100,between Swest+Sbosch
7861	Other vehicle negligent		100,Between Klapmuts+Sbosch,intersection Kromme Rhee Rd
7869	B (male) negligent		80,between Swest+Sbosch,Jamestown robots
7876	A (male) falls asleep	Roadworks 40km/h	80,between Swest+Sbosch,Jamestown robots
7981	B (male)jumps robot	Roadworks 40km/h	60,between Swest+Sbosch,Jamestown robots
7986	Animal in road		100,between Swest+Sbosch,entrance Eikendal farm
8006	A (male) negligent	A speeding?	80,Intersection with Knorhoek pad
8013	Other vehicle negligent		80,intersection with Anandale Rd
8051	Animal in road	Early morning (02h15)	100,between Swest+Sbosch,300m from Eikendal farm
8057	Animal in road		100,Between Klapmuts+Sbosch,near Warwick farm
8091	Animal in road		100,between Swest+Sbosch,100m from Mountain Breeze
8099	Unclear A(male)/ B(male) negligent		60
8112	Animal in road	Late at night (23H30)	100,Between Klapmuts+Sbosch,entrance Kanonkop Estate
8136	A(male)/ B(male) negligent		80,intersection with Anandale Rd
8148	B (male) negligent		60,between Swest+Sbosch,Jamestown robots
8153	B (male) negligent	Early morning (01h30)	80,between Swest+Sbosch,Jamestown robots
8155	Other vehicle negligent		Between Swest+Sbosch,200m from 7/11robot
8160	A (male) negligent	B dangerously parked	60,Between Stellenbosch+Klapmuts,at Morgenhof
8188	A(male) lose control/negligent		100,Between Klapmuts+Sbosch
8197	B (unknown) negligent		100,Between Klapmuts+Sbosch,intersection Krommery Rd

8283	Single vehicle overturned (male) Mazda car	A leaves road to collide with wall and overturns
8286	Accident with pedestrian	P walking in road
8305	Accident with fixed object	A avoids stationary vehicle and hits railing
8314	Head/Rear end	B waiting to turn right,A comes from behind,collision
8317	Accident with fixed object	Other vehicle comes from behind at high speed,A tries to avoid accident with it and collides into robot
8324	Sideswipe-same direction	A+B both change lanes
8352	Head/Rear end,rather approach at angle-both travel straight	A crosses R44,collides with B travelling straight
8360	Turn right in face of oncoming traffic	B turns right crossing R44 which A is travelling straight on,collision
8417	Head/Rear end(1)	B tire burst,"tol" in road,collides with A behind him,both vehicles roll,B also caught fire
8424	Single vehicle overturned (male) Opel car	A lose control and rolls off road
8426	Turn left from wrong lane,rather sideswipe same direction	A turns left into R44,B comes from opposite side into R44,collision
8449	Head/Rear end	B changes lanes to left lane where A is travelling in,collision
8528	Single vehicle overturned (male) Opel Astra	A(male) lose control,car skids
8531	Turn left from woring lane,rather Head/Rear end	Crossing the R44,a truck was blocking A+B's view,B moved forward to turn left and A followed,collision
8532	Single vehicle overturned (male) Mercedes Benz Midibus	Other vehicle travelling in opposite direction drives in A's lane,A has to swerve to avoid other vehicle,overturns
8535	Head/Rear end,rather sideswipe-same direction	B in fast lane moving slowly(maybe turning),A comes over hill,can't slowdown fast enough,scrapes A's side when pas
8537	Sideswipe-opposite direction	B waiting to turn right into R44,A turns right into T-Park,collision
8551	Sideswipe-same direction	Cyclist moves infront of road,collision with A
8554	Single vehicle overturned (male) Toyota LDV	Unknown
8555	Head/Rear end	Unclear
8557	Accident with pedestrian	P crossing road
8563	Accident with animal	A drives into dog
8564	Head/Rear end	A slows down for robot,B collides from behind
8585	Other, rather Other: Accident with cyclist	Cyclist hit front left mirror,cyclist drive in opposite direction
8588	Head/Rear end	A stationary at robot,B collides from behind
8589	Sideswipe-same direction	B changes lanes to left lane where A is travelling in,collision
8601	Single vehicle overturned (male) Toyota LDV	Unknown
8608	Single vehicle overturned (male) Honda Ballade	Front left tire burst,A(male) lose control and vehicle overturns
8609	Sideswipe-same direction	B overtakes A on left,hits A in process
8628	Accident with pedestrian	P crossing road
8628	Sideswipe-same direction,rather accident with fixed object	A puts right indicator on,but suddenly swerves to left side,into pole
8631	Head/Rear end	B slows down to watch accident scene,A comes from behind, can't slow down fast enough,collision
8651	Sideswipe-same direction	A stationary at robot,B brakes fail and collide with A on right side
8656	Sideswipe-opposite direction,rather same direction	A waiting to turn right,B collides from behind
8669	Unknown,rather accident with pedestrian	P walking in road
8730	Head/Rear end	B waiting to turn right,A comes from behind,collision

8283	A(male) lose control/negligent		60,1ste Cloetesville ingang
8286	P in road		80,between Swest+Sbosch,Technopark turnoff
8305	Unclear A(male) negligent/stationary vehicle in road	Early morning (03h35)	100,Between Klapmuts+Sbosch,intersection Kromme Rhee Rd
8314	A(male) intoxicated		100,Between Klapmuts+Sbosch,entrance Kanonkop Estate
8317	Other vehicle negligent		80,between Swest+Sbosch,Jamestown robots
8324	Unclear A(female)/ B(male) negligent		??,intersection Mietjiesvlei
8352	A (male) negligent	A (male) liquor use suspected	80,intersection with Anandale Rd
8360	B (male) negligent	B (male)no drivers licence	80,between Swest+Sbosch,Jamestown robots
8417	B vehicle right front tire burst(Toyota Land Cruiser)		100,between Swest+Sbosch,Mooiberge entrance
8424	Front tire burst		100
8426	B(male) negligent	B no drivers licence	80,intersection with Anandale Rd
8449	B(male) negligent	B 69years old	Between Swest+Sbosch,near Mountainbreeze
8528	A(male) lose control,car skids	Rain+Late at night (23H00)	Between Swest+Sbosch
8531	A (female) negligent		80,intersection with Anandale Rd
8532	Other vehicle negligent		100,Intersection with Knorhoek pad
8535	Unclear A(male)/ B(female) negligent		100,near Rus+Vrede Farm
8537	Unclear A(male)/ B(unknown) negligent		Between Swest+Sbosch,opposite T-Park entrance,in centre of road
8551	Cyclist negligent crossing road		Between Swest+Sbosch,just past airstrip
8554	A(male) lose control/negligent		Between Swest+Sbosch,opposite Klein Schuur Farm
8555	Unclear A(male)/ B(female) negligent	Early morning (01h10)	Between Swest+Sbosch,300m from Klein Schuur Farm
8557	P in road	P liquor use suspected,road very dark	Between Swest+Sbosch,just infront of T-park entrance
8563	Animal in dog	Early morning (00h10) NewYears Morning	Between Swest+Sbosch
8564	B(male) negligent		80,between Swest+Sbosch,Jamestown robots
8585	Cyclist(male) negligent	Cyclist liquor use suspected	Between Swest+Sbosch
8588	B(male) negligent		?
8589	B(male) negligent		?
8601	A(male) lose control/negligent		?
8608	A(male) lose control	A only learners licence	Between Klapmuts+Sbosch,opposite Laiback Vineyard
8609	B(unknown) negligent		Between Klapmuts+Sboscg,between Nietvoorbij+Fir Str
8628	P in road		100,between Swest+Sbosch,entrance Eikendal Vineyards
8628	A (female) negligent		100,Intersection with Knorhoek pad
8631	B(male) negligent		100,between Klapmuts+Sbosch,near Elsenburg Rd
8651	B brakes fail (Toyota 1991)		Between Klapmuts+Sbosch,Weltevrede crossing
8656	B(unknown) negligent		100,Intersection with Knorhoek pad
8669	P in road		100,between Klapmuts+Sbosch,150m after Elsenburg Rd
8730	A (female) negligent	A 72 years old	?? Lavenie afrit

8778	Head/Rear end,rather vehicle left road	B turns in right infront of A travelling straight,A swerves into ditch to avoid accident
8780	Accident with pedestrian(1)	P walking in road
8789	Sideswipe-same direction	A was changing lanes and B travelling straight,collision,B(GV)>3500kg) rolls
8797	Sideswipe-same direction	B makes U-turn and A collides from behind
8804	Head/Rear end	A waiting to turn right,B collides from behind
8830	Sideswipe-same direction	Traffic officer in right lane shows B to go to left lane,A collides from behind with B in left lane
8836	Accident with pedestrian(1)	P walking in road
8839	Unknown,rather approach at angle-one or both turning	B makes U-turn and A collides from behind
8844	Accident with animal	A drives into dog
8856	Head/Rear end	Pile-up of 5 vehicles
8857	Sideswipe-same direction	B waiting to turn right,A overtaking on left side,collision
8868	Head/Rear end	B waiting to turn right,A comes from behind,collision
8873	Head/Rear end	B makes U-turn and A collides from behind
8875	Head/Rear end	B slows down for other vehicle turning left,A collides from behind
8885	Accident with fixed object	A swerves out for dog,hits pole
8887	Sideswipe-opposite direction	A turns into R44 from Annandale,B travelling straight,collision
8892	Accident with fixed object	Another vehicle turns in right infront of A travelling straight,A swerves into middleman to avoid accident
8929	Head/Rear end	A slows down for man+pack of dogs crossing road,B collides from behind
8941	Single vehicle overturned (male) BMW 1997	A lose control and rolls off road
8970	Head/Rear end	Unclear
9002	Sideswipe-same direction	Unclear
9017	Accident with fixed object	A swerves out for dog,hits curb,right front tire burst(VWGolf 1999)
9052	Head on	A spots chairs in road,pulls off road,facing uncoming traffic with lights on,B travelling straight collides with A
9066	Sideswipe-opposite direction	A stationary,waits to cross R44,B turns left at robot into A's drirection,slips on water,collision
9074	Single vehicle overturned (male) BMW316i 1993	Another vehicle turns in right infront of A travelling straight,A's car rolls
9089	Accident with fixed object,rather vehicle leave road	B enters road A is travelling straight on,A drives into ditch to avoid accident
9098	Sideswipe-opposite direction,rather approach at angle-both travelling straight	B crosses R44,collides with A travelling straight
9100	Unknown,rather vehicle left road	Another vehicle crosses road in A travelling straight's way,A swerves and loses control and leaves road
9149	Head/Rear end	C has to stop suddenly after robot for stationary vehicles, B collides from behind
9242	Head/Rear end	A trvels behind B,A moves to right lane,B also moves to right lane without signalling,collision
9272	Head/Rear end	A changes to right lane where B is travelling straight,collides from behind with B
9273	Head/Rear end	A collides from behind with B
9282	Turn left from wrong lane,rather sideswipe same direction	A moving straight in right lane,other vehicle move from left to right lane,collision
9283	Sideswipe-same direction	A turning right,B overtakes on right side,collision
9300	Head/Rear end	In sequence C(infront),B,A(behind).C suddenly stops in road,B also suddenly stops,then A collide from behind with B
9335	Accident with pedestrian	P crossing road

8778	B(unknown) negligent	Late at night (23H30)	Between Swest+Sbosch,near La Pineta restaurant
8780	P in road		80,intersection with Anandale Rd
8789	Unknown A(male)/B(male) negligent		80,intersection with Anandale Rd
8797	Unclear A(female)/ B(male) negligent		Between Klapmuts+Sbosch,+-10m from Remhoogte Farm
8804	B(male) negligent		80,between Swest+Sbosch,centre of road across T-park
8830	Traffic officer negligent?	A(male) negligent?	Between Swest+Sbosch,intersection airstrip
8836	P in road	Late at night (22H10)	60,Between Stellenbosch+Klapmuts,at Morgenhof
8839	Unclear A(male)/ B(male) negligent	B taxi,doesn't stop after accident	100,Between Klapmuts+Sbosch,200m from Kanonkop Farm
8844	Animal in dog	Early morning (05h50)	Le Avenir Farm
8856	Unclear 2females/3males negligent		100,between Swest+Sbosch
8857	A (male) negligent		100,Between Klapmuts+Sbosch,intersection Kromme Rhee Rd
8868	A (female) negligent		Entrance Warwick
8873	A (male) negligent		Between Klapmuts+Sbosch,intersection Firs Str
8875	A (male) negligent		Between Klapmuts+Sbosch,Nietvoorbij entrance
8885	Dog in road	Rain+Early morning (02h00)	100,between Swest+Sbosch,after airstrip
8887	Unclear A(male)/ B(male) negligent		80,intersection with Anandale Rd
8892	Other vehicle negligent	Early morning (02h00)	Between Swest+Sbosch,across Mooiberge
8929	Man+pack of dogs crossing road	B(female) negligent	80,between Swest+Sbosch,Jamestown robots
8941	A(male) lose control	Can't show drivers licence Early morning (02h10)	100,between Swest+Sbosch,100m from Eikendal Vineyards
8970	Unclear A(male)/ B(female) negligent		60,Between Stellenbosch+Klapmuts,at Morgenhof
9002	Unclear A(male)/ B(male) negligent	B(male) liquor use tested Early morning (4h50)	80,between Swest+Sbosch,Jamestown robots
9017	Dog in road	Early morning (04h15)	Berween Klapmuts+Sbosch,near Welgevonden robots
9052	A(male) negligent,blinds A,should rather put hazards on	Early morning (02h50)	100,Between Klapmuts+Sbosch
9066	Water running over road	B(male) negligent	DR01053xMR00027?,between Swest+Sbosch,Jamestown robots
9074	Other vehicle negligent		100,between Swest+Sbosch,100m from Mountain Breeze
9089	B(female) negligent	B 73 years old	80,Intersection with Knorhoek pad
9098	A (female) negligent,drive without headlights	A(female) drove without headlights 18h45	80,between Swest+Sbosch,Technopark turnoff
9100	Other vehicle negligent		100,between Swest+Sbosch,Sweetwell entrance
9149	C (male)sudden stop/B(male) negligent	Very misty (07h35),4vehicles involved	Berween Klapmuts+Sbosch,intersection robots Warwick at Klapmuts Long S
9242	B(unknown) negligent		Near Jamestown robots
9272	A (female) negligent		Between Swest+Sbosch,opposite airstrip
9273	A (male) negligent		Between Sbosch+Swest,50m in front of Stellenrust entrance
9282	Other vehicle negligent	Other vehicle taxi	80,intersection with Anandale Rd
9283	B(male) negligent		100,Between Klapmuts+Sbosch,intersection Kromme Rhee Rd
9300	C (unknown) negligent,dangerous sudden stop	C(tractor) belongs to De Zalze Farm R44	Between Sbosch+Swest,between Tpark+Jtown
9335	P in road	P 12 years old	Between Klapmuts+Sbosch,Nietvoorbij entrance

1215??	Sideswipe-opposite direction rather same direction	B overtakes A and hits A in process

Bylaag C - Verandering van klassifikasies

Acc no	Ou klassifikasie	Nuwe klassifikasie	Addisionele inligting
116	Other	Accident with fixed object	Eintlik loose object
217	Turn left from wrong lane	Turn left/right from wrong lane	na korreksie
248	Unknown	Accident with fixed object	Eintlik loose object
414	Unknown	Other: Vehicle left road	
701	Other	Other: Vehicle left road	
1394	Other	Accident with pedestrian	Eintlik cyclist
1617	Other	Accident with fixed object	Eintlik loose object
2037	Other	Other: Vehicle left road	
2059	Other	Other: Vehicle left road	
3076	Other	Other: Vehicle left road	
3263	Other	Other: Vehicle left road	
3271	Unknown	Other: Vehicle left road	
3641	Other	Other: Vehicle left road	
3895	Other	Accident with fixed object	Eintlik loose object
3940	Other	Other: Vehicle left road	
3946	Other	Accident with fixed object	Eintlik loose object
4275	Other	Other: Vehicle left road	
4329	Other	Other: Vehicle left road	
4332	Other	Other: Vehicle left road	
4378	Turn left from wrong lane	Turn left/right from wrong lane	
4415	Other	Other: Vehicle left road	
4585	Other	Accident with pedestrian	Eintlik cyclist
4672	Other	Other: Vehicle left road	
5058	Turn left from wrong lane	Turn left/right from wrong lane	
5069	Other	Other: Vehicle left road	
5081	Other	Other: Vehicle left road	
6878	Other	Other: Vehicle left road	
7451	Unknown	Other: Vehicle left road	
7648	Other	Accident with pedestrian	Eintlik cyclist
8136	Turn right from wrong lane	Turn left/right from wrong lane	
8585	Other	Accident with pedestrian	nie volledig gecapture, eintlik cyclist
9100	Unknown	Other: Vehicle left road	nie volledig gecapture

Bylaag D - Foutiewe klassifikasies

Acc no	Ou klassifikasie	Nuwe klassifikasie	Addisionele inligting	Addisionele inligting
12	Accident with pedestrian	Accident with fixed object		
119	Sideswipe: same direction	Sideswipe: opposite directions		
121	Turn right from wrong lane	Sideswipe: same direction		
217	Unknown	Turn left from wrong lane		
217	Unknown	Turn left from wrong lane		
318	Unknown	Accident with pedestrian		
339	Other	Sideswipe: opposite directions		
488	Unknown	Approach at angle-both travelling straight		
667	Turn right from wrong lane	Other: Vehicle left road		Kon Other/Unknown gewees het
699	Other	Accident with pedestrian		
838	Other	Accident with fixed object		
846	Sideswipe: opposite directions	Sideswipe: same direction		
1027	Approach at angel-one or both turning	Head/Rear end		
1182	Other	Accident with fixed object		
1215	Sideswipe: opposite directions	Sideswipe: same direction	nie volledig gecapture	
1388	Sideswipe: same direction	Accident with fixed object		
1396	Other	Single vehicle overturned		
1463	Sideswipe: same direction	Accident with fixed object		
1486	Other	Accident with fixed object		
1490	Accident with fixed object	Other: Vehicle left road		Kon Other/Unknown gewees het
1500	Unknown	Sideswipe: same direction		
1513	Other	Accident with fixed object		
2017	Turn left from wrong lane	Sideswipe: same direction		
2069	Approach at angel-one or both turning	Sideswipe: opposite directions		
2079	Sideswipe: opposite directions	Sideswipe: same direction		
2225	Other	Accident with pedestrian		
2604	Unknown	Accident with animal		
2680	Sideswipe: opposite directions	Sideswipe: same direction		
3064	Other	Accident with fixed object		
3078	Other	Head/Rear end		
3079	Turn right in face of oncoming traffic	Sideswipe: opposite directions		
3245	Sideswipe: opposite directions	Head/Rear end		
3248	Sideswipe: opposite directions	Approach at angle-both travelling straight		
3251	Unknown	Accident with fixed object		
3252	Unknown	Accident with fixed object		

Acc no	Ou klassifikasie	Nuwe klassifikasie	Addisionele inligting	Addisionele inligting
3257	Unknown	Sideswipe: same direction		
3278	Unknown	Approach at angle-both travelling straight		
3701	Sideswipe: opposite directions	Sideswipe: same direction		
3736	Sideswipe: opposite directions	Head/Rear end		
3891	Unknown	Sideswipe: same direction		
3897	Turn left from wrong lane	Sideswipe: same direction		
3941	Sideswipe: same direction	Turn right in face of oncoming traffic		
4039	Sideswipe: opposite directions	Head/Rear end		
4107	Unknown	Sideswipe: opposite directions		
4360	Other	Sideswipe: same direction		
4425	Sideswipe: opposite directions	Sideswipe: same direction		
4432	Sideswipe: opposite directions	Head/Rear end		
4435	Approach at angel-one or both turning	Sideswipe: same direction		
4454	Other	Approach at angle-both travelling straight		
4573	Accident with pedestrian	Accident with fixed object		
4680	Head/Rear end	Turn right in face of oncoming traffic		
4737	Sideswipe: opposite directions	Sideswipe: same direction		
4757	Other	Sideswipe: same direction		
4977	Other	Single vehicle overturned		
5063	Unknown	Head on		
5091	Sideswipe: same direction	Approach at angle-both travelling straight		
5616	Unknown	Sideswipe: same direction		
5617	Unknown	Accident with pedestrian		
5656	Sideswipe: opposite directions	Approach at angle-both travelling straight		
6857	Turn left from wrong lane	Turn right in face of oncoming traffic		
6894	Approach at angle-both travelling straight	Sideswipe: opposite directions		
7155	Unknown	Head/Rear end		
7156	Other	Accident with fixed object		
7157	Sideswipe: same direction	Sideswipe: opposite directions		
7186	Other	Sideswipe: opposite directions		
7191	Other	Accident with fixed object		
7223	Unknown	Single vehicle overturned		
7230	Other	Sideswipe: same direction		
7270	Other	Accident with fixed object		
7319	Approach at angel-one or both turning	Sideswipe: same direction		

Acc no	Ou klassifikasie	Nuwe klassifikasie	Addisionele inligting	Addisionele inligting
7345	Unknown	Head/Rear end		
7420	Unknown	Sideswipe: same direction		
7587	Accident with fixed object	Other: Vehicle left road		Kon Other/Unknown gewees het
7981	Sideswipe: opposite directions	Sideswipe: same direction		
8153	Turn left from wrong lane	Sideswipe: same direction		
8352	Head/Rear end	Approach at angle-both travelling straight	nie volledig gecapture	
8426	Turn left from wrong lane	Sideswipe: same direction	nie volledig gecapture	
8531	Turn left from wrong lane	Head/Rear end	nie volledig gecapture	
8535	Head/Rear end	Sideswipe: same direction	nie volledig gecapture	
8628	Sideswipe: same direction	Accident with fixed object	nie volledig gecapture	
8656	Sideswipe: opposite directions	Sideswipe: same direction	nie volledig gecapture	
8669	Unknown	Accident with pedestrian		
8778	Head/Rear end	Other: Vehicle left road	nie volledig gecapture	Kon Other/Unknown gewees het
8839	Unknown	Approach at angel-one or both turning	nie volledig gecapture	
9089	Accident with fixed object	Other: Vehicle left road	nie volledig gecapture	Kon Other/Unknown gewees het
9098	Sideswipe: opposite directions	Approach at angle-both travelling straight	nie volledig gecapture	
9282	Turn left from wrong lane	Sideswipe: same direction		

Bylaag E - Volumedata en ongelukskoersberekening

SWes-SBosch

Acc No	Road	Sectio	Node	Date	Time	Accident Type	Fatal	Serious	Slight	No Inj
2000										
318	MR0027	1	[redacted]	05/02/2000	14:20	Unknown	0	0	0	1
669	MR0027	1	[redacted]	23/01/2000	01:30	Single vehicle overturned	0	0	1	0
845	MR0027	1	[redacted]	23/07/2000	16:00	Head on	0	0	4	1
1180	MR0027	1	[redacted]	25/07/2000	07:50	Sideswipe - same direction	0	0	0	1
1456	MR0027	1	[redacted]	30/12/2000	18:00	Accident with fixed object	0	0	0	1
3257	MR0027	1	[redacted]	10/05/2000	17:30	Unknown	0	0	0	2
2001										
1383	MR0027	1	[redacted]	26/03/2001	18:15	Single vehicle overturned	0	0	1	1
1394	MR0027	1	[redacted]	02/03/2001	16:00	Other	0	0	0	1
1404	MR0027	1	[redacted]	09/05/2001	07:40	Head/Rear end	0	0	0	1
1407	MR0027	1	[redacted]	11/05/2001	17:35	Turn right in face of oncoming traffic	0	0	0	2
1409	MR0027	1	[redacted]	26/05/2001	03:45	Head on	1	1	0	0
1455	MR0027	1	[redacted]	14/03/2001	17:40	Accident with pedestrian	0	0	1	1
1467	MR0027	1	[redacted]	12/04/2001	17:00	Head/Rear end	0	0	0	1
1476	MR0027	1	[redacted]	20/01/2001	12:00	Sideswipe - same direction	0	0	0	2
1477	MR0027	1	[redacted]	03/01/2001	18:10	Accident with pedestrian	0	0	1	0
1481	MR0027	1	[redacted]	11/04/2001	13:30	Single vehicle overturned	0	1	0	0
1488	MR0027	1	[redacted]	26/04/2001	03:00	Single vehicle overturned	0	0	1	0
1490	MR0027	1	[redacted]	26/04/2001	19:00	Accident with fixed object	0	0	0	1
1498	MR0027	1	[redacted]	06/03/2001	08:35	Head/Rear end	0	0	0	2
1500	MR0027	1	[redacted]	28/03/2001	17:15	Unknown	0	0	0	1
1507	MR0027	1	[redacted]	16/05/2001	18:10	Head/Rear end	0	0	0	2
1522	MR0027	1	[redacted]	11/01/2001	12:30	Approach at angel- both travel straigh	0	0	2	0
1526	MR0027	1	[redacted]	15/04/2001	02:45	Accident with fixed object	2	2	0	0
1550	MR0027	1	[redacted]	06/02/2001	09:20	Sideswipe - same direction	0	0	0	2
1558	MR0027	1	[redacted]	16/03/2001	08:45	Accident with fixed object	0	0	0	1
1925	MR0027	1	[redacted]	08/12/2001	14:00	Head/Rear end	0	0	0	2
3879	MR0027	1	[redacted]	02/03/2001	09:00	Sideswipe - same direction	0	0	0	1
3897	MR0027	1	[redacted]	07/06/2001	09:45	Turn left from wrong lane	0	0	0	1
4378	MR0027	1	[redacted]	07/04/2001	04:30	Turn left from wrong lane	0	0	0	2
2002										
5227	MR0027	1	[redacted]	02/12/2002	00:00	Other	0	0	1	1
7052	MR0027	1	[redacted]	14/04/2002	03:00	Single vehicle overturned	0	0	0	1

7179	MR0027	1	[redacted]	03/05/2002	19:35	Approach at angel - one or both turnir	0	0	0	2
7319	MR0027	1	[redacted]	11/05/2002	10:10	Approach at angel - one or both turnir	0	0	1	1
7360	MR0027	1	[redacted]	21/05/2002	15:30	Sideswipe - opposite direction	0	0	0	2
7377	MR0027	1	[redacted]	25/05/2002	13:30	Sideswipe - opposite direction	0	0	2	0
7526	MR0027	1	[redacted]	22/06/2002	15:45	Single vehicle overturned	0	1	0	0
7589	MR0027	1	[redacted]	16/07/2002	08:45	Turn right in face of oncoming traffic	0	0	1	0
7610	MR0027	1	[redacted]	05/07/2002	07:50	Head/Rear end	0	0	0	2
7784	MR0027	1	[redacted]	15/08/2002	17:30	Head/Rear end	0	0	1	2
8013	MR0027	1	[redacted]	23/09/2002	18:15	Sideswipe - same direction	0	0	0	2
8036	MR0027	1	[redacted]	27/09/2002	11:04	Head/Rear end	0	0	0	1
8136	MR0027	1	[redacted]	07/10/2002	17:30	Turn right from wrong lane	0	0	0	1
8352	MR0027	1	[redacted]	16/11/2002	20:00	Head/Rear end	0	0	0	0
8426	MR0027	1	[redacted]	30/11/2002	07:20	Turn left from wrong lane	0	0	0	0
8531	MR0027	1	[redacted]	17/12/2002	17:00	Turn right from wrong lane	0	0	0	0

Sbosch-Klapmuts

Acc No	Road	Sectio	Node	Date	Time	Accident Type	Fatal	Serious	Slight	No Inj
2000										
115	MR0027	1	Km 51.75 Mark	07/01/2000	18:00	Head/Rear end	0	0	0	2
116	MR0027	1	Km 51.75 Mark	11/01/2000	11:30	Other	0	0	0	2
315	MR0027	1	Km 48.4 Mark	19/02/2000	14:30	Accident with fixed object	0	0	0	1
316	MR0027	1	Km 48.8 Mark	24/02/2000	08:09	Head on	1	4	0	0
352	MR0027	1	Km 49.15 Mark	17/10/2000	07:20	Single vehicle overturned	0	0	1	0
355	MR0027	1	MR00027 X MR00205	22/10/2000	17:30	Sideswipe - opposite direction	0	0	0	2
701	MR0027	1	MR00027 X MR00189	23/04/2000	11:00	Other	0	0	1	0
838	MR0027	1	Km 48.4 Mark	30/01/2000	17:45	Other	0	0	0	3
839	MR0027	1	Km 48.4 Mark	02/06/2000	06:30	Head/Rear end	0	0	0	2
840	MR0027	1	Km 47.3 Mark	19/06/2000	07:40	Sideswipe - same direction	0	0	0	2
841	MR0027	1	Km 47.3 Mark	02/06/2000	08:55	Accident with fixed object	0	0	0	1
843	MR0027	1	MR00027 X MR00205	21/08/2000	18:05	Accident with animal	0	0	0	1
844	MR0027	1	Km 49.95 Mark	24/04/2000	16:00	Approach at angel- both travel straight	0	0	3	0
848	MR0027	1	Km 49.95 Mark	12/05/2000	19:30	Other	0	0	0	1
853	MR0027	1	Km 50.95 Mark	19/06/2000	15:30	Accident with animal	0	1	1	0
3218	MR0027	1	MR00027 X MR00189	09/08/2000	15:10	Head/Rear end	0	0	0	2
3241	MR0189	1	MR00027 X MR00189	11/08/2000	20:30	Accident with fixed object	0	0	0	1
3248	MR0027	1	Km 51.75 Mark	23/07/2000	12:30	Sideswipe - opposite direction	0	0	1	1
3251	MR0027	1	Km 51.75 Mark	01/02/2000	21:00	Unknown	0	0	0	1
3260	MR0189	1	MR00027 X MR00189	07/07/2000	10:30	Head/Rear end	0	0	0	2
3261	MR0189	1	MR00027 X MR00189	24/05/2000	07:10	Head/Rear end	0	0	0	2
3262	MR0189	1	MR00027 X MR00189	11/05/2000	21:30	Unknown	0	1	0	0
3270	MR0189	1	MR00027 X MR00189	18/03/2000	13:50	Sideswipe - opposite direction	0	0	0	2
3278	MR0027	1	Km 51.75 Mark	21/02/2000	15:25	Unknown	0	0	2	0
3279	MR0027	1	Km 50.75 Mark	01/04/2000	12:45	Reversing	0	0	0	2
3644	MR0027	1	MR00027 X MR00189	01/05/2000	06:40	Head/Rear end	0	0	0	2
2001										
1119	MR0027	1	km mark 50.77KM (Merchant Straat)	10/03/2001	18:15	Head/Rear end	0	0	0	1
1144	MR0027	1	km mark 50.77KM (Merchant Straat)	17/03/2001	07:20	Turn right in face of oncoming traffic	0	0	1	1
1173	MR0027	1	Km 47.3 Mark	18/10/2001	03:30	Accident with animal	0	0	0	1
1388	MR0027	1	Km 40 Mark	10/02/2001	07:45	Sideswipe - same direction	0	0	0	2
1391	MR0027	1	Km 37.9 Mark	17/03/2001	18:30	Accident with pedestrian	0	0	2	1
1396	MR0027	1	Km 44.75 Mark	03/03/2001	03:00	Other	0	0	0	1

1401	MR0027	1	Km 42.5 Mark	07/05/2001	08:20	Head/Rear end	0	0	0	2
1412	MR0027	1	Km 36.7 Mark	02/03/2001	15:10	Head/Rear end	0	0	0	2
1416	MR0027	1	Km 38.5 Mark	03/02/2001	12:50	Head/Rear end	0	0	0	2
1463	MR0027	1	Km 38.45 Mark	21/01/2001	09:20	Sideswipe - same direction	0	0	1	0
1470	MR0027	1	Km 39.25 Mark	14/04/2001	16:45	Approach at angel- both travel straigh	0	0	1	1
1486	MR0027	1	Km 39.3 Mark	24/04/2001	14:00	Other	0	0	2	0
1497	MR0027	1	Km 42.9 Mark	26/05/2001	13:00	Head on	0	1	1	0
1501	MR0027	1	Km 38.5 Mark	28/04/2001	22:15	Accident with fixed object	0	0	2	0
1511	MR0027	1	Km 38.55 Mark	29/01/2001	10:11	Head/Rear end	0	0	2	1
1517	MR0027	1	Km 42.9 Mark	12/04/2001	08:10	Head/Rear end	0	0	0	2
1535	MR0027	1	Km 38.45 Mark	10/06/2001	21:40	Accident with fixed object	0	0	0	1
1537	MR0027	1	Km 38.45 Mark	03/03/2001	08:15	Accident with pedestrian	0	0	0	2
2017	MR0027	1	Km 50 Mark	25/11/2001	17:40	Turn left from wrong lane	0	0	0	2
2063	MR0027	1	Km 51.1 Mark	14/12/2001	10:35	Sideswipe - same direction	0	0	0	2
2079	MR0027	1	Km 42.2 Mark	03/11/2001	20:49	Sideswipe - opposite direction	0	0	1	1
2089	MR0027	1	Km 48.85 Mark	13/09/2001	21:30	Single vehicle overturned	0	0	0	1
2098	MR0027	1	Km 47.6 Mark	14/11/2001	11:50	Head/Rear end	0	0	0	2
3079	MR0189	1	MR00027 X MR00189	11/05/2001	15:50	Turn right in face of oncoming traffic	0	0	0	2
3910	MR0189	1	MR00027 X MR00189	26/04/2001	12:40	Head/Rear end	0	0	0	1
3918	MR0189	1	MR00027 X MR00189	11/05/2001	16:15	Unknown	0	0	0	0
3926	MR0027	1	Regoor Pot Belly Pantry	28/06/2001	06:20	Accident with pedestrian	0	0	0	1
3933	MR0027	1	MR00027 X MR00189	16/02/2001	16:30	Accident with pedestrian	0	0	1	1
3939	MR0189	1	MR00027 X MR00189	11/05/2001	16:15	Turn right in face of oncoming traffic	0	0	0	1
4158	MR0189	1	MR00027 X MR00189	14/04/2001	12:20	Approach at angel- both travel straigh	0	0	1	1
4425	MR0027	1	DR01084 X MR00027	18/10/2001	12:00	Sideswipe - opposite direction	0	0	0	2
4432	MR0027	1	MR00027 X MR00189	15/03/2001	10:15	Sideswipe - opposite direction	0	0	1	1
5001	MR0027	1	MR00027 X MR00189	08/01/2001	07:45	Head/Rear end	0	0	0	2
5037	MR0189	1	MR00027 X MR00189	03/07/2001	17:35	Approach at angel- both travel straigh	0	0	0	2
5058	MR0027	1	MR00027 X MR00189	06/09/2001	08:45	Turn left from wrong lane	0	0	0	2
5062	MR0027	1	MR00027 X MR00189	30/07/2001	13:00	Head/Rear end	0	0	0	2
6915	MR0027	1	DR01084 X MR00027	16/03/2001	01:45	Head/Rear end	0	0	0	2
2002										
1617	MR0027	1	Km 41 Mark	19/02/2002	17:27	Other	0	0	0	2
1943	MR0027	1	Km 49.4 Mark	03/02/2002	14:30	Sideswipe - same direction	0	0	0	2
1961	MR0189	1	MR00027 X MR00189	26/09/2002	14:10	Head/Rear end	0	0	0	2
1975	MR0027	1	Km 47.3 Mark	01/01/2002	00:05	Single vehicle overturned	0	0	1	0

2040	MR0027	1	Km 47.3 Mark	27/07/2002	00:05	Accident with animal	0	0	0	1
2045	MR0027	1	Km 49.45 Mark	17/08/2002	20:40	Accident with animal	0	0	0	1
2057	MR0027	1	Km 48.45 Mark	17/09/2002	09:30	Sideswipe - same direction	0	1	0	1
2060	MR0027	1	Km 49.9 Mark	28/08/2002	00:35	Single vehicle overturned	0	0	0	1
2070	MR0027	1	Km 48.5 Mark	25/08/2002	19:00	Accident with pedestrian	0	0	0	1
2141	MR0027	1	Km 46.25 Mark	21/10/2002	15:15	Sideswipe - same direction	0	0	0	2
2225	MR0027	1	Km 38.5 Mark	17/11/2002	17:25	Other	0	0	1	1
2245	MR0027	1	Km 48.65 Mark	19/10/2002	23:20	Approach at angel- both travel straigh	0	0	0	2
2246	MR0027	1	Km 50.1 Mark	14/11/2002	11:45	Head/Rear end	0	0	0	2
2509	MR0027	1	MR00027 X MR00205	20/11/2002	15:20	Accident with pedestrian	0	0	0	1
2510	MR0027	1	Km 47.6 Mark	13/12/2002	18:40	Head on	0	0	1	2
4680	MR0027	1	Km 48.15 Mark	21/03/2002	15:50	Head/Rear end	0	0	0	2
4961	MR0027	1	Km 50.75 Mark	25/02/2002	09:40	Head/Rear end	0	0	1	2
5000	MR0189	1	MR00027 X MR00189	17/01/2002	08:00	Approach at angel- both travel straigh	0	0	0	2
5127	MR0027	1	Km 37.55 Mark	04/10/2002	21:10	Accident with pedestrian	0	1	0	1
5500	MR0027	1	Km 50.8 Mark	13/12/2002	23:15	Approach at angel- both travel straigh	0	0	0	2
6779	MR0027	1	DR01085 X MR00027	08/03/2002	07:25	Approach at angel - one or both turnir	0	0	1	1
6790	MR0027	1	DR01085 X MR00027	15/03/2002	16:05	Sideswipe - same direction	0	0	0	2
6904	MR0027	1	DR01084 X MR00027	18/03/2002	17:50	Accident with pedestrian	0	1	0	1
6979	MR0027	1	DR01085 X MR00027	28/03/2002	15:45	Turn right in face of oncoming traffic	0	0	0	2
7156	MR0027	1	Km 47.65 Mark	14/04/2002	00:10	Other	0	0	0	1
7157	MR0027	1	MR00027 X MR00189	15/04/2002	14:45	Sideswipe - same direction	0	0	2	0
7159	MR0027	1	MR00027 X MR00205	23/04/2002	10:05	Sideswipe - same direction	0	0	0	2
7160	MR0027	1	MR00027 X MR00189	27/04/2002	03:40	Single vehicle overturned	0	0	1	0
7187	MR0027	1	MR00027 X MR00189	01/05/2002	06:30	Head/Rear end	0	0	0	2
7192	MR0027	1	DR01085 X MR00027	28/02/2002	20:40	Sideswipe - same direction	0	0	0	2
7223	MR0027	1	DR01090 X MR00027	23/05/2002	11:50	Unknown	0	0	1	0
7334	MR0027	1	DR01090 X MR00027	10/05/2002	22:20	Single vehicle overturned	0	0	0	1
7392	MR0027	1	DR01090 X MR00027	29/05/2002	01:30	Accident with animal	0	0	0	1
7644	MR0027	1	DR01084 X MR00027	21/06/2002	13:40	Turn right in face of oncoming traffic	0	0	0	2
7861	MR0027	1	DR01085 X MR00027	20/08/2002	14:45	Sideswipe - same direction	0	0	0	1
8006	MR0027	1	DR01084 X MR00027	18/09/2002	13:30	Sideswipe - same direction	0	1	6	1
8197	MR0027	1	DR01085 X MR00027	19/10/2002	21:00	Head/Rear end	0	0	0	1
8305	MR0027	1	DR01085 X MR00027	09/11/2002	03:35	Accident with fixed object	0	0	0	0

Date	Pad-km	GDV	GDV	GDV	Date	Pad-km	GDV	GDV	GDV	Date	Pad-km	GDV	GDV	GDV
			4501					5930					6778	
01/10/1992	MR00189 Klapmuts 51.15	5881?		4501?	25/01/2000	MR00189 Klapmuts 51.15	2511		3673	21/10/2002	MR00189 Klapmuts 51.15	2748		3983
			5881					8185					8929	
			6622					8085						
14/08/1994	MR00205 Simondium 50.67	☒		1244	19/01/2000	MR00205 Simondium 50.67	☒		2277					
			5818					8126						
			5046					7842						
25/06/1988	DR01090 Hoopenberg 44.81	829		☒	20/01/2000	DR01090 Hoopenberg 44.81	815		☒					
			5730					8290						
			5904					7660						
12/06/1990	DR01085 Koelenhof 42.89	652		☒	21/01/2000	DR01085 Koelenhof 42.89	1132		☒					
			5884					7630						
								8743						
					24/01/2000	DR01084 Knorhoek 42.48	☒		589					
								8756						
								12661						
					27/01/2000	36.2	☒		☒					
								12661		8714				
								20951						
					10/05/2000	31.2	☒		☒					
								20951						
								20828						
					06/03/2000	DR01053 Weigegund 31.04	☒		173					
								20828						
								17289						
					10/05/2000	MR00169 DFMalanAmphi 30.17	☒		434					
								22185						
			10909		10/05/2000			22185					24715	
20/04/1987	Jamestown 29.6	☒		809	09/05/2000	Jamestown 29.6	☒		2290	12/11/2003	Jamestown 29.6	☒		2427
			10158		09/05/2000			19850					23157	
20/09/1988			13133					17042						
07/08/1987	DR01053 Audacia 27.15	☒		201	09/05/2000	DR01053 Audacia 27.15	☒		147					
20/09/1988			13200					16144						
			16032					17000					21634	
17/08/1994	Annandale 26.59	597		1582	08/05/2000	Annandale 26.59	**3065**		825	24/10/2002	Annandale 26.59	**3568**		840
			15546					14297					21984	
			15053					16539					22089	
30/03/1993	Eikendal 24.66	☒		253	11/05/2000	Eikendal 24.66	☒		312	11/11/2003	Eikendal 24.66	☒		509
			15059					17332					21614	
			11639					15339						
04/09/1991	Winery Road 23.38	1500		☒	05/05/2000	Winery Road 23.38	2010		☒					
			11274					16632						
								13815						
					04/05/2000	Bredell Pad 21.96	901		☒					
								16244						
								18080.6						

Bylaag F - Toegangspaaie

Left						Right					
Feature left	Feature right	Km	m diff	Description	Speed limit	Feature left	Feature right	Km	m diff	Description	Speed limit
Somerset West	Municipal	21.37		Boundary		Somerset West	Municipal	21.37		Boundary	
Majuba	Bituminous Open	21.44		PA Homestead	100						
OP9 Bredell Rd	OP14 Helderberg	21.96	520	Intersection	100						
Happy Valley	Surfaced open	22.39	430	PA Homestead	100						
Scholtzenhof	Gravel Open	23.03	640	PA Homestead	100						
MR166 Winery Rd		23.38	350	Junction Road	100						
Sweet Well	Surfaced Gate/2	23.96	580	PA Homestead	100						
							DR1043 Eikenda	24.66		Junction Ro	100
						Surfaced Gate	**Eikendal**	24.68	20	PA Homeste	100
Rust en Vrede	Surfaced open	24.68	720	PA Homestead	100						
Art School	Gravel Gate/2	25.03	350	PA Homestead	100						
Farm	Gravel Open	25.4	370	PA Homestead	100						
Nursery	Surfaced open	25.53	130	PA Homestead	100						
Farm	Gravel Open	26.33	800	PA Homestead	100						
DR1050 Annandale Rd	**DR1050 Annandale Rd**	26.59	260	Intersection	100	**DR1050 Annand**	**DR1050 Annand**	26.59	1910	Intersection	100
Die Wilge	Surfaced gate	26.67	80	PA Homestead	100						
Unknown	Surfaced gate	27.06	390	PA Homestead	100						
							DR1053 Stellenr	27.15	560	Junction Ro	100
Rd to Flying Field		27.65	590	Junction Road	100						
Jatan	Surfaced gate	27.98	330	PA Homestead	100						
Clementine	Surfaced gate	28.03	50	PA Homestead	100						
Unknown	Gravel Open	28.23	200	PA Homestead	100						
Kleinbosch	Paved Gate	28.24	10	PA Homestead	100						
Drie Lande	Gravel Gate	28.48	240	PA Homestead	100						
Uitsig	Surfaced gate	28.85	370	PA Homestead	80/100						
							Unknown Rd	29	1850	Junction Ro	100
DR1056 Webersvallei		29.6	750	Junction Road	80		**DR1056 Webers**	29.6	600	Junction Ro	80
De Zalze	Surfaced open	29.81	210	PA Homestead	80						
Tweefontein	Gravel Gate	30.14	330	PA Homestead	80						
Technopark		30.28	140	Junction Road	80						
Stellenbosch	Municipal (Inner)	31.2		Boundary		Stellenbosch	Municipal (Inner)	31.2		Boundary	
Stellenbosch	Municipal	36.2		Boundary		Stellenbosch	Municipal	36.2		Boundary	
Cloetesville Rd		36.83		PA Homestead							
Cloetesville Rd		37.3	470	Junction Road	60						
						Surfaced Open	**Nietvoorbij**	37.6		PA Homeste	60

Feature left	Feature right	Km	m diff	Description	Speed limit
					80
Unknown	Surfaced open	38.12	820	PA Homestead	80
Green Oaks	Surfaced open	38.47	350	PA Homestead	80
Welgevonden Landgoed				Intersection	80
					100
Broonhills Farm	Gravel Open	38.94	470	PA Homestead	100
Hotel	Surfaced	39.13	190	PA Homestead	100
Packham Farm	Bituminous Open	39.27	140	PA Homestead	100
Woodlands Farm	Bituminous Open	39.48	210	PA Homestead	100
Bon-Esperance	Bituminous Open	40.61	1130	PA Homestead	100
Vredenhof	Bituminous Open	40.76	150	PA Homestead	100
Summerhill	Gravel Open	41.04	280	PA Homestead	100
Slaley	Surfaced open	42.47	1430	PA Homestead	100
Farm Cottages	Surfaced open	42.81	340	PA Homestead	100
DR1085 Kromme Rhee		42.89	80	Junction Road	100
De Clapmuts	Bituminous Open	44.71	1820	PA Homestead	100
DR1090 Muldersvlei		44.81	100	Junction Road	100
Farm	Surfaced open	44.92	110	PA Homestead	100
Laibach	Bituminous Open	45.6	680	PA Homestead	100
De Goede Sukses	Surfaced open	45.86	260	PA Homestead	100

Feature left	Feature right	Km	m diff	Description	Speed limit
Gravel Open	**Timberlea**	37.89	290	PA Homeste	60
Surfaced Open	**Salvation Army**	38.2	310	PA Homeste	80
Surfaced Open	**Farm**	38.43	230	PA Homeste	80
Surfaced Open	**Baraboo**	38.52	90	PA Homeste	80
Bituminous Open	**Babin Farm**	38.84	320	PA Homeste	80
Gravel Open	**Morgenhof Farm**	39.27	430	PA Homeste	100
Surfaced Gate	**Farm**	39.44	170	PA Homeste	100
Bituminous Open	**Meron**	39.72	280	PA Homeste	100
Surfaced Open	**Farm**	40.02	300	PA Homeste	100
Bituminous Open	**Remhoogte**	40.55	530	PA Homeste	100
Bituminous Open	**Aandgloed**	41.11	560	PA Homeste	100
Bituminous Open	**Dennegeur**	41.27	160	PA Homeste	100
Surfaced Open	**Farm Cottages**	41.42	150	PA Homeste	100
Surfaced Open	**Unknown**	42.2	780	PA Homeste	100
	DR1084 Knorhoe	42.48	280	Junction Ro	100
Surfaced Gate	**Farm**	42.8	320	PA Homeste	100
Gravel Open	**Unknown**	44.31	1510	PA Homeste	100
Bituminous Open	**Kanonkop**	44.73	420	PA Homeste	100
Gravel Open	**Unknown**	45.19	460	PA Homeste	100
Surfaced Gate/2	**Unknown**	45.61	420	PA Homeste	100

Feature left	Feature right	Km	m diff	Description	Speed limit	Feature left	Feature right	Km	m diff	Description	Speed limit
Unknown	Surfaced gate	45.97	110	PA Homestead	100						
Warwick Farm	Gravel Open	46.23	260	PA Homestead	100						
Unknown	Surfaced gate	46.47	240	PA Homestead	100						
						Bituminous Open	**Lievland**	47.3	1690	PA Homeste	100
						Bituminous Open	**Wiesenhof**	47.6	300	PA Homeste	100
Le Bonheur	Bituminous Open	47.64	1170	PA Homestead	100						
Unknown	Surfaced open	47.9	260	PA Homestead	100						
						Surfaced Open	**Valley Road**	48.12	520	PA Homeste	100
						Gravel Open	**Uitkyk**	48.52	400	PA Homeste	100
						Surfaced Gate	**Farm**	48.86	340	PA Homeste	100
Unknown	Surfaced gate	48.97	1070	PA Homestead	100						
						Gravel Gate/2	**Unknown**	49.35	490	PA Homeste	100
Spinlea	Surfaced open	49.38	410	PA Homestead	100						
						Gravel Open	**Bronkhorst**	49.44	90	PA Homeste	100
Farm	Surfaced open	49.61	230	PA Homestead	100						
					80	Gravel Open	**Mount Vermon**	49.63	190	PA Homeste	100
Potbelly Pantry	Gravel Open	49.99	380	PA Homestead	60						
Heen en Weer	Surfaced open	50.19	200	PA Homestead	60						
Unknown	Surfaced gate	50.27	80	PA Homestead	60						
							MR205 Simondi	50.67	1040	Junction Ro	60
OP68 Merchant Street		50.77	500	Junction Road	60						
Street	Surfaced	50.8	30	Junction Road	60						
MR189 Belville R101	**MR189 Oaarl R101**	51.15		Intersection		**MR189 Belville R**	**MR189 Oaarl R1**	51.15		Intersection	

Bylaag G - CBA-data

3.3.1 Verwantskappe: Totale botsings

2) Hour&Acc Tp

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Hour=8	Head/Rear end	20	5.0	10	50.0

3) Atype&light

Head/Rear end	Daylight	103	25.5	88	85.4
Sideswipe: same direction	Daylight	56	13.9	50	89.3
Accident with pedestrian	Daylight	42	10.4	28	66.7
Accident with fixed object	Daylight	40	9.9	20	50.0
Sideswipe: opposite directions	Daylight	35	8.7	21	60.0
Approach at angle-both travelling straight	Daylight	21	5.2	11	52.4
Turn right in face of oncoming traffic	Daylight	11	2.7	8	72.7
Accident with animal	Night-unlit	18	4.5	10	55.6

4) A type&Veh Tp

Head/Rear end	Motorcar/station wagon	104	25.7	55	52.9
Sideswipe: same direction	Motorcar/station wagon	56	13.9	35	62.5
Accident with pedestrian	Motorcar/station wagon	42	10.4	29	69.0
Accident with fixed object	Motorcar/station wagon	40	9.9	25	62.5
Single vehicle overturned	Motorcar/station wagon	39	9.7	24	61.5
Sideswipe: opposite directions	Motorcar/station wagon	35	8.7	20	57.1
Other: Vehicle left road	Motorcar/station wagon	21	5.2	14	66.7
Approach at angle-both travelling straight	Motorcar/station wagon	21	5.2	13	61.9
Accident with animal	Motorcar/station wagon	18	4.5	11	61.1
Turn right in face of oncoming traffic	Motorcar/station wagon	11	2.7	7	63.6

5) A Type&Cause

Head/Rear end	Negligence	104	25.7	92	88.5
Sideswipe: same direction	Negligence	56	13.9	50	89.3
Accident with pedestrian	P in road	42	10.4	32	76.2
Accident with fixed object	Negligence	40	9.9	25	62.5
P in road	Accident with pedestrian	39	9.7	32	82.1
Sideswipe: opposite directions	Negligence	35	8.7	29	82.9
Animal in road	Accident with animal	23	5.7	18	78.3
Approach at angle-both travelling straight	Negligence	21	5.2	15	71.4
Accident with animal	Animal in road	18	4.5	18	100.0
Turn right in face of oncoming traffic	Negligence	11	2.7	10	90.9

6) A type&pfault

Head/Rear end	Driver	104	25.7	84	80.8
Sideswipe: same direction	Driver	56	13.9	45	80.4
Pedestrian	Accident with pedestrian	43	10.6	35	81.4
Accident with pedestrian	Pedestrian	42	10.4	35	83.3
Sideswipe: opposite directions	Driver	35	8.7	24	68.6
Animal	Accident with animal	23	5.7	17	73.9
Approach at angle-both travelling straight	Driver	21	5.2	13	61.9
Accident with animal	Animal	18	4.5	18	100.0
Turn right in face of oncoming traffic	Driver	11	2.7	10	90.9

7) Atype&Gender

Head/Rear end	Male	104	25.7	56	53.8
Sideswipe: same direction	Male	56	13.9	29	51.8
Sideswipe: opposite directions	Male	35	8.7	19	54.3

10) Cause&pfault

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Negligence	Driver	266	65.8	229	86.1
Driver	Negligence	235	58.2	229	97.4
Pedestrian	P in road	43	10.6	39	90.7
P in road	Pedestrain	39	9.7	39	100.0
Unknown pfault	Unknown cause	37	9.2	35	94.6
Unknown cause	Unknown pfault	35	8.7	35	100.0
Other	Negligence	34	8.4	34	100.0
Vehicle	Vehicle problem	26	6.4	26	100.0
Vehicle problem	Vehicle	26	6.4	26	100.0
Animal	Animal in road	23	5.7	23	100.0
Animal in road	Animal	23	5.7	23	100.0

11) Cause&Weekday

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Friday	Negligence	74	18.3	55	74.3
Saturday	Negligence	71	17.6	41	57.7
Thursday	Negligence	65	16.1	47	72.3
Monday	Negligence	50	12.4	34	68.0
Wednesday	Negligence	49	12.1	35	71.4
Tuesday	Negligence	41	10.1	28	68.3

12) Cause&Hour

Hour=17	Negligence	41	10.1	25	61.0
Hour=13	Negligence	33	8.2	24	72.7
Hour=15	Negligence	28	6.9	20	71.4
Hour=12	Negligence	26	6.4	16	61.5
Hour=7	Negligence	24	5.9	20	83.3
Hour=18	Negligence	24	5.9	14	58.3
Hour=16	Negligence	21	5.2	18	85.7
Hour=8	Negligence	20	5.0	15	75.0
Hour=14	Negligence	20	5.0	14	70.0
Hour=11	Negligence	19	4.7	12	63.2
Hour=9	Negligence	18	4.5	14	77.8
Hour=19	Negligence	16	4.0	8	50.0
Hour=10	Negligence	15	3.7	12	80.0
Hour=20	Negligence	13	3.2	8	61.5
Hour=22	Negligence	12	3.0	6	50.0
Hour=5	Negligence	11	2.7	8	72.7
Hour=23	Negligence	11	2.7	6	54.5

13) Cause&Light

Daylight	Negligence	270	66.8	196	72.6
Negligence	Daylight	266	65.8	196	73.7
Night-unlit	Negligence	88	21.8	47	53.4
P in road	Daylight	39	9.7	22	56.4
Unknown	Daylight	35	8.7	22	62.9
Vehicle problem	Daylight	26	6.4	17	65.4
Animal in road	Night-unlit	23	5.7	12	52.2
Night-lit by streetlights	Negligence	21	5.2	11	52.4
Dawn/dusk	Negligence	17	4.2	9	52.9

14) Cause&Veh Tp

Negligence	Motorcar/station wagon	266	65.8	158	59.4
Motorcar/station wagon	Negligence	242	59.9	158	65.3
Light Delivery Vehicle	Negligence	90	22.3	61	67.8
P in road	Motorcar/station wagon	39	9.7	29	74.4
GVM>3500kg	Negligence	26	6.4	15	57.7
Animal in road	Motorcar/station wagon	23	5.7	14	60.9
Other Vehicle Type	Negligence	12	3.0	10	83.3

15) Cause&Gender

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Male	Negligence	173	42.8	157	90.8
Negligence	Male	266	65.8	157	59.0
Female	Negligence	49	12.1	43	87.8

16) Cause&Age

Age=21-30	Negligence	56	13.9	52	92.9
Age=31-40	Negligence	49	12.1	46	93.9
Age=41-50	Negligence	34	8.4	33	97.1
Age=51-60	Negligence	26	6.4	25	96.2
Age=<=20	Negligence	18	4.5	12	66.7
Age=>60	Negligence	15	3.7	14	93.3

17) Pfault&Driver

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Friday	Driver	74	18.3	52	70.3
Thursday	Driver	65	16.1	43	66.2
Monday	Driver	50	12.4	29	58.0
Wednesday	Driver	49	12.1	31	63.3
Tuesday	Driver	41	10.1	21	51.2

18) PFault&Hour

Hour=17	Driver	41	10.1	25	61.0
Hour=13	Driver	33	8.2	22	66.7
Hour=15	Driver	28	6.9	18	64.3
Hour=12	Driver	26	6.4	14	53.8
Hour=7	Driver	24	5.9	17	70.8
Hour=16	Driver	21	5.2	12	57.1
Hour=8	Driver	20	5.0	14	70.0
Hour=14	Driver	20	5.0	11	55.0
Hour=11	Driver	19	4.7	11	57.9
Hour=9	Driver	18	4.5	13	72.2
Hour=19	Driver	16	4.0	9	56.3
Hour=10	Driver	15	3.7	10	66.7
Hour=20	Driver	13	3.2	8	61.5
Hour=22	Driver	12	3.0	6	50.0
Hour=5	Driver	11	2.7	6	54.5

19) PFault&Light

Daylight	Driver	270	66.8	171	63.3
Driver	Daylight	235	58.2	171	72.8
Pedestrian	Daylight	43	10.6	25	58.1
Unknown	Daylight	37	9.2	24	64.9
Other	Daylight	34	8.4	25	73.5
Vehicle	Daylight	26	6.4	17	65.4
Night-lit by streetlights	Driver	21	5.2	11	52.4
Dawn/dusk	Driver	17	4.2	9	52.9

21) PFault& Gender

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Driver	Male	235	58.2	160	68.1
Male	Driver	173	42.8	160	92.5
Female	Driver	49	12.1	43	87.8

22) PFault&Age

Age=21-30	Driver	56	13.9	53	94.6
Age=31-40	Driver	49	12.1	47	95.9
Age=41-50	Driver	34	8.4	33	97.1
Age=51-60	Driver	26	6.4	24	92.3
Age=<=20	Driver	18	4.5	13	72.2
Age=>60	Driver	15	3.7	13	86.7

24) WDay&Light

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Friday	Daylight	74	18.3	48	64.9
Saturday	Daylight	71	17.6	47	66.2
Thursday	Daylight	65	16.1	43	66.2
Sunday	Daylight	54	13.4	29	53.7
Monday	Daylight	50	12.4	37	74.0
Wednesday	Daylight	49	12.1	34	69.4
Tuesday	Daylight	41	10.1	32	78.0

25) Wday&Veh Tp

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Friday	Motorcar/station wagon	74	18.3	48	64.9
Saturday	Motorcar/station wagon	71	17.6	42	59.2
Thursday	Motorcar/station wagon	65	16.1	39	60.0
Sunday	Motorcar/station wagon	54	13.4	36	66.7
Monday	Motorcar/station wagon	50	12.4	29	58.0
Wednesday	Motorcar/station wagon	49	12.1	27	55.1
Tuesday	Motorcar/station wagon	41	10.1	21	51.2

26) Wday&Gend

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Friday	Male	74	18.3	40	54.1

29) Hour&Veh Tp

Hour=17	Motorcar/station wagon	41	10.1	28	68.3
Hour=13	Motorcar/station wagon	33	8.2	21	63.6
Hour=15	Motorcar/station wagon	28	6.9	16	57.1
Hour=12	Motorcar/station wagon	26	6.4	15	57.7
Hour=18	Motorcar/station wagon	24	5.9	16	66.7
Hour=7	Motorcar/station wagon	24	5.9	13	54.2
Hour=14	Motorcar/station wagon	20	5.0	13	65.0
Hour=19	Motorcar/station wagon	16	4.0	13	81.3
Hour=10	Motorcar/station wagon	15	3.7	8	53.3
Hour=20	Motorcar/station wagon	13	3.2	11	84.6
Hour=22	Motorcar/station wagon	12	3.0	9	75.0
Hour=21	Motorcar/station wagon	12	3.0	9	75.0
Hour=5	Motorcar/station wagon	11	2.7	7	63.6
Hour=23	Motorcar/station wagon	11	2.7	7	63.6

30) Hour&Gender

Hour=9	Male	18	4.5	9	50.0
Hour=20	Male	13	3.2	8	61.5
Hour=22	Male	12	3.0	6	50.0
Hour=5	Male	11	2.7	6	54.5

32) Light&Gender

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Male	Daylight	173	42.8	118	68.2
Female	Daylight	49	12.1	43	87.8

33) Light&Age

Age=21-30	Daylight	56	13.9	39	69.6
Age=31-40	Daylight	49	12.1	36	73.5
Age=41-50	Daylight	34	8.4	27	79.4
Age=51-60	Daylight	26	6.4	16	61.5
Age=<=20	Daylight	18	4.5	12	66.7
Age=>60	Daylight	15	3.7	13	86.7

3.3.2 Verwantskappe: Enkel botsings

2) Hour&Acc tp

Hour=13	Single vehicle overturned	12	7.5	6	50.0
Hour=15	Accident with pedestrian	10	6.3	5	50.0
Hour=18	Accident with pedestrian	12	7.5	6	50.0

3) Atype&light

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Accident with pedestrian	Daylight	42	26.3	28	66.7
Accident with fixed object	Daylight	40	25.0	20	50.0
Accident with animal	Night-unlit	18	11.3	10	55.6

4) A type&Veh Tp

Accident with pedestrian	Motorcar/station wagon	42	26.3	29	69.0
Accident with fixed object	Motorcar/station wagon	40	25.0	25	62.5
Single vehicle overturned	Motorcar/station wagon	39	24.4	24	61.5
Other: Vehicle left road	Motorcar/station wagon	21	13.1	14	66.7
Accident with animal	Motorcar/station wagon	18	11.3	11	61.1
GVM>3500kg	Single vehicle overturned	10	6.3	5	50.0

5) A Type&Cause

Accident with pedestrian	P in road	42	26.3	32	76.2
Accident with fixed object	Negligence	40	25.0	25	62.5
P in road	Accident with pedestrian	38	23.8	32	84.2
Animal in road	Accident with animal	23	14.4	18	78.3
Vehicle problem	Single vehicle overturned	19	11.9	11	57.9
Accident with animal	Animal in road	18	11.3	18	100.0
Unknown	Single vehicle overturned	14	8.8	7	50.0

6) A type&pfault

Accident with pedestrian	Pedestrian	42	26.3	35	83.3
Pedestrian	Accident with pedestrian	41	25.6	35	85.4
Animal	Accident with animal	22	13.8	17	77.3
Vehicle	Single Vehicle Overturned	19	11.9	11	57.9
Accident with animal	Animal	18	11.3	18	100.0
Unknown	Single Vehicle Overturned	14	8.8	7	50.0
Other	Accident with fixed object	12	7.5	7	58.3

10) Cause&Pfault

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Negligence	Driver	58	36.3	45	77.6
Driver	Negligence	48	30.0	45	93.8
Pedestrian	P in road	41	25.6	38	92.7
P in road	Pedestrian	38	23.8	38	100.0
Animal	Animal in road	23	14.4	23	100.0
Animal in road	Animal	23	14.4	23	100.0
Vehicle	Vehicle problem	19	11.9	19	100.0
Vehicle problem	Vehicle	19	11.9	19	100.0
Unknown pfault	Unknown cause	14	8.8	14	100.0
Unknown cause	Unknwon pfault	14	8.8	14	100.0
Other	Negligence	12	7.5	12	100.0

11) Cause&Wday

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Wednesday	Negligence	22	13.8	12	54.5

13) Cause&Light

Negligence	Daylight	58	36.3	32	55.2
P in road	Daylight	38	23.8	22	57.9
Animal in road	Night-unlit	23	14.4	12	52.2
Vehicle problem	Daylight	19	11.9	11	57.9
Unknown	Night-unlit	14	8.8	7	50.0

14) Cause&Veh Tp

Negligence	Motorcar/station wagon	58	36.3	34	58.6
P in road	Motorcar/station wagon	38	23.8	28	73.7
Animal in road	Motorcar/station wagon	23	14.4	14	60.9
Unknown	Motorcar/station wagon	14	8.8	10	71.4

15) Cause&Gender

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Negligence	Male	58	36.3	34	58.6
Male	Negligence	48	30.0	34	70.8
Female	Negligence	15	9.4	9	60.0

16) Cause&Age

Age=21-30	Negligence	15	9.4	12	80.0
Age=31-40	Negligence	12	7.5	9	75.0

17) Pfault&Wday

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Wednesday	Driver	22	13.8	11	50.0

18) Hour&pfault

Hour=18	Pedestrian	12	7.5	6	50.0

19) Pfault&light

Driver	Daylight	48	30.0	25	52.1
Pedestrian	Daylight	41	25.6	24	58.5
Animal	Night-unlit	22	13.8	11	50.0
Vehicle	Daylight	19	11.9	11	57.9
Unknown	Night-unlit	14	8.8	7	50.0
Other	Daylight	12	7.5	8	66.7

20) Pfault&Veh Tp

Driver	Motorcar/station wagon	48	30.0	30	62.5
Pedestrian	Motorcar/station wagon	41	25.6	31	75.6
Animal	Motorcar/station wagon	22	13.8	14	63.6
Unknown	Motorcar/station wagon	14	8.8	10	71.4
Other	Motorcar/station wagon	12	7.5	6	50.0

21) Pfault&Gender

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Male	Driver	48	30.0	37	77.1
Driver	Male	48	30.0	37	77.1
Female	Driver	15	9.4	9	60.0

22) PFault&Age

Age=21-30	Driver	15	9.4	12	80.0
Age=31-40	Driver	12	7.5	10	83.3

24) Wday&Light

Saturday	Daylight	29	18.1	16	55.2
Friday	Night-unlit	26	16.3	13	50.0
Thursday	Night-unlit	22	13.8	11	50.0
Wednesday	Daylight	22	13.8	12	54.5
Tuesday	Daylight	17	10.6	11	64.7
Monday	Daylight	14	8.8	10	71.4

25) Wday&Veh Tp (5 oor)

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Sunday	Motorcar/station wagon	30	18.8	21	70.0
Saturday	Motorcar/station wagon	29	18.1	17	58.6
Friday	Motorcar/station wagon	26	16.3	20	76.9
Thursday	Motorcar/station wagon	22	13.8	16	72.7
Wednesday	Motorcar/station wagon	22	13.8	13	59.1
Tuesday	Motorcar/station wagon	17	10.6	10	58.8

27) Age&Wday

Age=31-40	Wednesday	12	7.5	6	50.0

29) Hour&Veh Tp

Hour=13h	Motorcar/station wagon	12	7.5	8	66.7
Hour=18h	Motorcar/station wagon	12	7.5	9	75.0
Hour=21h	Motorcar/station wagon	11	6.9	8	72.7
Hour=15h	Motorcar/station wagon	10	6.3	6	60.0

32) Light&Gender

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Female	Daylight	15	9.4	13	86.7

33) Age&Light

Age=31-40	Daylight	12	7.5	9	75.0

3.3.3 Verwantskappe: Veel voertuie botsings

1) A type&Wday

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Wday=Thursday	Head/Rear end	43	17.6	22	51.2
Wday=Wednesday	Head/Rear end	27	11.1	16	59.3

2) Hour&Acc Tp

Hour=13	Head/Rear end	21	8.6	12	57.1
Hour=8	Head/Rear end	16	6.6	10	62.5
Hour=9	Sideswipe: same direction	12	4.9	8	66.7
Hour=11	Head/Rear end	12	4.9	7	58.3
Hour=18	Head/Rear end	12	4.9	6	50.0
Hour=10	Head/Rear end	12	4.9	6	50.0

3) Atype&light

Head/Rear end	Daylight	104	42.6	88	84.6
Sideswipe: same direction	Daylight	56	23.0	50	89.3
Sideswipe: opposite directions	Daylight	35	14.3	21	60.0
Approach at angle-both travelling straight	Daylight	21	8.6	11	52.4
Turn right in face of oncoming traffic	Daylight	11	4.5	8	72.7

4) A type&Veh Tp

Head/Rear end	Motorcar/station wagon	104	42.6	55	52.9
Sideswipe: same direction	Motorcar/station wagon	56	23.0	35	62.5
Sideswipe: opposite directions	Motorcar/station wagon	35	14.3	20	57.1
Approach at angle-both travelling straight	Motorcar/station wagon	21	8.6	13	61.9
Turn right in face of oncoming traffic	Motorcar/station wagon	11	4.5	7	63.6
Light Delivery Vehicle	Head/Rear end	58	23.8	32	55.2

5) A Type&Cause

Head/Rear end	Negligence	104	42.6	92	88.5
Sideswipe: same direction	Negligence	56	23.0	50	89.3
Sideswipe: opposite directions	Negligence	35	14.3	29	82.9
Approach at angle-both travelling straight	Negligence	21	8.6	15	71.4
Turn right in face of oncoming traffic	Negligence	11	4.5	10	90.9

6) A type&pfault

Head/Rear end	Driver	104	42.6	84	80.8
Sideswipe: same direction	Driver	56	23.0	45	80.4
Sideswipe: opposite directions	Driver	35	14.3	24	68.6
Approach at angle-both travelling straight	Driver	21	8.6	13	61.9
Turn right in face of oncoming traffic	Driver	11	4.5	10	90.9

7) Type&Gender

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Head/Rear end	Male	104	42.6	56	53.8
Sideswipe: same direction	Male	56	23.0	29	51.8
Sideswipe: opposite directions	Male	35	14.3	19	54.3

8) Atype&Age

Age=21-30	Head/Rear end	41	16.8	21	51.2
Age=51-60	Head/Rear end	20	8.2	10	50.0

10) Cause&pfault

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Negligence	Driver	208	85.2	184	88.5
Driver	Negligence	187	76.6	184	98.4
Unknown pfault	Unknown cause	23	9.4	21	91.3
Other	Negligence	22	9.0	22	100.0
Unknown cause	Unknown pfault	21	8.6	21	100.0

11) Cause&Wday

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Friday	Negligence	48	19.7	45	93.8
Thursday	Negligence	43	17.6	37	86.0
Saturday	Negligence	42	17.2	33	78.6
Monday	Negligence	36	14.8	30	83.3
Wednesday	Negligence	27	11.1	23	85.2
Tuesday	Negligence	24	9.8	21	87.5
Sunday	Negligence	24	9.8	19	79.2

12) Cause&Time

Hour=17	Negligence	32	13.1	24	75.0
Hour=13	Negligence	21	8.6	19	90.5
Hour=7	Negligence	19	7.8	18	94.7
Hour=15	Negligence	18	7.4	18	100.0
Hour=12	Negligence	18	7.4	12	66.7
Hour=16	Negligence	17	7.0	15	88.2
Hour=8	Negligence	16	6.6	13	81.3
Hour=14	Negligence	13	5.3	12	92.3
Hour=9	Negligence	12	4.9	19	158.3
Hour=18	Negligence	12	4.9	11	91.7
Hour=10	Negligence	12	4.9	11	91.7
Hour=11	Negligence	12	4.9	10	83.3

13) Cause&Light

Negligence	Daylight	208	85.2	164	78.8
Daylight	Negligence	190	77.9	164	86.3
Night-unlit	Negligence	29	11.9	26	89.7
Unknown	Daylight	21	8.6	16	76.2
Dawn/dusk	Negligence	11	4.5	9	81.8
Night-lit by streetlights	Negligence	10	4.1	6	60.0

14) Cause&Veh Tp

Negligence	Motorcar/station wagon	208	85.2	124	59.6
Motorcar/station wagon	Negligence	139	57.0	124	89.2
Light Delivery Vehicle	Negligence	58	23.8	48	82.8
GVM>3500kg	Negligence	16	6.6	12	75.0
Combi/minibus	Negligence	11	4.5	6	54.5

15) Cause&Gender

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Negligence	Male	208	85.2	123	59.1
Male	Negligence	125	51.2	123	98.4
Female	Negligence	34	13.9	34	100.0

16) Cause&Age

Age=21-30	Negligence	41	16.8	40	97.6
Age=31-40	Negligence	37	15.2	37	100.0
Age=41-50	Negligence	26	10.7	26	100.0
Age=51-60	Negligence	20	8.2	20	100.0
Age=>60	Negligence	13	5.3	13	100.0

17) Pfault&Wday

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Friday	Driver	48	19.7	45	93.8
Thursday	Driver	43	17.6	34	79.1
Saterday	Driver	42	17.2	29	69.0
Monday	Driver	36	14.8	24	66.7
Wednesday	Driver	27	11.1	20	74.1
Sunday	Driver	24	9.8	18	75.0
Tuesday	Driver	24	9.8	16	66.7

18) PFault&Hour

Hour=17	Driver	32	13.1	24	75.0
Hour=13	Driver	21	8.6	17	81.0
Hour=7	Driver	19	7.8	15	78.9
Hour=15	Driver	18	7.4	16	88.9
Hour=12	Driver	18	7.4	12	66.7
Hour=16	Driver	17	7.0	12	70.6
Hour=8	Driver	16	6.6	12	75.0
Hour=14	Driver	13	5.3	9	69.2
Hour=11	Driver	12	4.9	9	75.0
Hour=18	Driver	12	4.9	9	75.0
Hour=10	Driver	12	4.9	9	75.0
Hour=9	Driver	12	4.9	10	83.3

19) PFault&Light

Daylight	Driver	190	77.9	146	76.8
Driver	Daylight	187	76.6	146	78.1
Night-unlit	Driver	29	11.9	22	75.9
Unknown	Daylight	23	9.4	18	78.3
Other	Daylight	22	9.0	17	77.3
Dawn/dusk	Driver	11	4.5	9	81.8
Night-lit by streetlights	Driver	10	4.1	7	70.0

20) Pfault&Driver

Driver	Motorcar/station wagon	187	76.6	118	63.1
Motorcar/station wagon	Driver	139	57.0	114	82.0
Light Delivery Vehicle	Driver	58	23.8	42	72.4
Other	Motorcar/station wagon	22	9.0	12	54.5
GVM>3500kg	Driver	16	6.6	11	68.8
Combi/minibus	Driver	11	4.5	6	54.5

21) Pfault&Gender

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Driver	Male	187	76.6	123	65.8
Male	Driver	125	51.2	123	98.4
Female	Driver	34	13.9	34	100.0

22) Pfault&Age

Age=21-30	Driver	41	16.8	41	100.0
Age=31-40	Driver	37	15.2	37	100.0
Age=41-50	Driver	26	10.7	26	100.0
Age=51-60	Driver	20	8.2	19	95.0
Age=>60	Driver	13	5.3	12	92.3

24) Wday&Light

Friday	Daylight	48	19.7	39	81.3
Thursday	Daylight	43	17.6	34	79.1
Saterday	Daylight	42	17.2	31	73.8
Monday	Daylight	36	14.8	27	75.0
Wednesday	Daylight	27	11.1	22	81.5
Tuesday	Daylight	24	9.8	21	87.5
Sunday	Daylight	24	9.8	16	66.7
Night-lit by streetlights	Friday	10	4.1	5	50.0

25) Wday&Veh Tp

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Friday	Motorcar/station wagon	48	19.7	28	58.3
Thursday	Motorcar/station wagon	43	17.6	23	53.5
Saturday	Motorcar/station wagon	42	17.2	25	59.5
Monday	Motorcar/station wagon	36	14.8	23	63.9
Wednesday	Motorcar/station wagon	27	11.1	14	51.9
Sunday	Motorcar/station wagon	24	9.8	15	62.5

26) Wday&Gender

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Friday	Male	48	19.7	32	66.7
Thursday	Male	43	17.6	22	51.2
Sunday	Male	24	9.8	13	54.2

29) Hours&Veh Tp

Hour=17	Motorcar/station wagon	32	13.1	21	65.6
Hour=13	Motorcar/station wagon	21	8.6	13	61.9
Hour=7	Motorcar/station wagon	19	7.8	11	57.9
Hour=12	Motorcar/station wagon	18	7.4	11	61.1
Hour=15	Motorcar/station wagon	18	7.4	10	55.6
Hour=8	Light Delivery Vehicle	16	6.6	8	50.0
Hour=14	Motorcar/station wagon	13	5.3	8	61.5
Hour=18	Motorcar/station wagon	12	4.9	7	58.3
Hour=11	Motorcar/station wagon	12	4.9	6	50.0
Hour=10	Motorcar/station wagon	12	4.9	6	50.0

30) Hour&Gender

Hour=13	Male	21	8.6	13	61.9
Hour=7	Male	19	7.8	11	57.9
Hour=15	Male	18	7.4	10	55.6
Hour=16	Male	17	7.0	9	52.9
Hour=9	Male	12	4.9	7	58.3
Hour=11	Male	12	4.9	6	50.0
Hour=18	Male	12	4.9	6	50.0
Hour=10	Male	12	4.9	6	50.0

32) Light&Gender

Field 1	Field 2	Field 1 #	Field 1 %	Field 2 #	Field 2 %
Daylight	Male	190	77.9	96	50.5
Male	Daylight	125	51.2	96	76.8
Female	Daylight	34	13.9	30	88.2
Night-unlit	Male	29	11.9	17	58.6

33) Light&Age

Age=21-30	Daylight	41	16.8	33	80.5
Age=31-40	Daylight	37	15.2	27	73.0
Age=41-50	Daylight	26	10.7	21	80.8
Age=51-60	Daylight	20	8.2	14	70.0
Age=>60	Daylight	13	5.3	11	84.6

Bylaag H – Statistica-data

2

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour8	Head/Rear end no	Head/Rear end yes	Row Totals
Count	no	290	94	384
Row Percent		75.52%	24.48%	
Count	yes	10	10	20
Row Percent		50.00%	50.00%	
Count	All Grps	300	104	404

3a

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Head/Rear end	daylight no	daylight yes	Row Totals
Count	no	113	182	295
Row Percent		38.31%	61.69%	
Count	yes	15	88	103
Row Percent		14.56%	85.44%	
Count	All Grps	128	270	398

3b

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sideswipe: same direction	daylight no	daylight yes	Row Totals
Count	No	123	220	343
Row Percent		35.86%	64.14%	
Count	Yes	5	50	55
Row Percent		9.09%	90.91%	
Count	All Grps	128	270	398

3c

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Accident with pedestrian	daylight no	daylight yes	Row Totals
Count	No	115	242	357
Row Percent		32.21%	67.79%	
Count	Yes	13	28	41
Row Percent		31.71%	68.29%	
Count	All Grps	128	270	398

3d

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Accident with fixed object	daylight no	daylight yes	Row Totals
Count	No	108	250	358
Row Percent		30.17%	69.83%	
Count	Yes	20	20	40
Row Percent		50.00%	50.00%	
Count	All Grps	128	270	398

3e

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sideswipe: opposite directions	daylight no	daylight yes	Row Totals
Count	No	114	249	363
Row Percent		31.40%	68.60%	
Count	Yes	14	21	35
Row Percent		40.00%	60.00%	
Count	All Grps	128	270	398

3f

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Approach at angle-both travelling straight	daylight no	daylight yes	Row Totals
Count	No	118	259	377
Row Percent		31.30%	68.70%	
Count	Yes	10	11	21
Row Percent		47.62%	52.38%	
Count	All Grps	128	270	398

3g

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Turn right in face of uncoming traffic	daylight no	daylight yes	Row Totals
Count	No	125	262	387
Row Percent		32.30%	67.70%	
Count	Yes	3	8	11
Row Percent		27.27%	72.73%	
Count	All Grps	128	270	398

3h

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Accident with animal	Night-unlit No	Night-unlit Yes	Row Totals
Count	No	303	78	381
Row Percent		79.53%	20.47%	
Count	Yes	7	10	17
Row Percent		41.18%	58.82%	
Count	All Grps	310	88	398

4a

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Head/Rear end	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	no	108	187	295
Row Percent		36.61%	63.39%	
Count	yes	48	55	103
Row Percent		46.60%	53.40%	
Count	All Grps	156	242	398

4b

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sideswipe: same direction	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	137	207	344
Row Percent		39.83%	60.17%	
Count	Yes	19	35	54
Row Percent		35.19%	64.81%	
Count	All Grps	156	242	398

4c

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Accident with pedestrian	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	144	213	357
Row Percent		40.34%	59.66%	
Count	Yes	12	29	41
Row Percent		29.27%	70.73%	
Count	All Grps	156	242	398

4d

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Accident with fixed object	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	142	217	359
Row Percent		39.55%	60.45%	
Count	Yes	14	25	39
Row Percent		35.90%	64.10%	
Count	All Grps	156	242	398

4e

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Single Vehicle overturned	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	141	218	359
Row Percent		39.28%	60.72%	
Count	Yes	15	24	39
Row Percent		38.46%	61.54%	
Count	All Grps	156	242	398

4f

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sideswipe: opposite directions	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	141	222	363
Row Percent		38.84%	61.16%	
Count	Yes	15	20	35
Row Percent		42.86%	57.14%	
Count	All Grps	156	242	398

4g

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Other: Vehicle left road	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	150	228	378
Row Percent		39.68%	60.32%	
Count	Yes	6	14	20
Row Percent		30.00%	70.00%	
Count	All Grps	156	242	398

4h

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Approach at angle-both travelling straight	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	148	229	377
Row Percent		39.26%	60.74%	
Count	Yes	8	13	21
Row Percent		38.10%	61.90%	
Count	All Grps	156	242	398

4i

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Accident with animal	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	149	231	380
Row Percent		39.21%	60.79%	
Count	Yes	7	11	18
Row Percent		38.89%	61.11%	
Count	All Grps	156	242	398

4j

	Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1) Marked cells have counts > 10 (Marginal summaries are not marked)			
	Turn right in face of uncoming traffic	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	152	235	387
Row Percent		39.28%	60.72%	
Count	Yes	4	7	11
Row Percent		36.36%	63.64%	
Count	All Grps	156	242	398

5a

	Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1) Marked cells have counts > 10 (Marginal summaries are not marked)			
	Head/Rear end	Negligence No	Negligence Yes	Row Totals
Count	no	126	174	300
Row Percent		42.00%	58.00%	
Count	yes	12	92	104
Row Percent		11.54%	88.46%	
Count	All Grps	138	266	404

5b

	Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1) Marked cells have counts > 10 (Marginal summaries are not marked)			
	Sideswipe: same direction	Negligence No	Negligence Yes	Row Totals
Count	No	132	216	348
Row Percent		37.93%	62.07%	
Count	Yes	6	50	56
Row Percent		10.71%	89.29%	
Count	All Grps	138	266	404

5c

	Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1) Marked cells have counts > 10 (Marginal summaries are not marked)			
	Accident with pedestrian	P in road No	P in road Yes	Row Totals
Count	No	355	7	362
Row Percent		98.07%	1.93%	
Count	Yes	10	32	42
Row Percent		23.81%	76.19%	
Count	All Grps	365	39	404

5e

	Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1) Marked cells have counts > 10 (Marginal summaries are not marked)			
	P in road	Accident with pedestrian No	Accident with pedestrian Yes	Row Totals
Count	No	355	10	365
Row Percent		97.26%	2.74%	
Count	Yes	7	32	39
Row Percent		17.95%	82.05%	
Count	All Grps	362	42	404

5d

	Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1) Marked cells have counts > 10 (Marginal summaries are not marked)			
	Accident with fixed object	Negligence No	Negligence Yes	Row Totals
Count	No	123	241	364
Row Percent		33.79%	66.21%	
Count	Yes	15	25	40
Row Percent		37.50%	62.50%	
Count	All Grps	138	266	404

5f

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sideswipe: opposite directions	Negligence No	Negligence Yes	Row Totals
Count	No	132	237	369
Row Percent		35.77%	64.23%	
Count	Yes	6	29	35
Row Percent		17.14%	82.86%	
Count	All Grps	138	266	404

5g

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Approach at angle-both travelling straight	Negligence No	Negligence Yes	Row Totals
Count	No	132	251	383
Row Percent		34.46%	65.54%	
Count	Yes	6	15	21
Row Percent		28.57%	71.43%	
Count	All Grps	138	266	404

5h

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Turn right in face of uncoming traffic	Negligence No	Negligence Yes	Row Totals
Count	No	137	256	393
Row Percent		34.86%	65.14%	
Count	Yes	1	10	11
Row Percent		9.09%	90.91%	
Count	All Grps	138	266	404

6a

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Head/Rear end	Driver No	Driver Yes	Row Totals
Count	no	149	151	300
Row Percent		49.67%	50.33%	
Count	yes	20	84	104
Row Percent		19.23%	80.77%	
Count	All Grps	169	235	404

6b

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sideswipe: same direction	Driver No	Driver Yes	Row Totals
Count	No	158	190	348
Row Percent		45.40%	54.60%	
Count	Yes	11	45	56
Row Percent		19.64%	80.36%	
Count	All Grps	169	235	404

6e

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sideswipe: opposite directions	Driver No	Driver Yes	Row Totals
Count	No	158	211	369
Row Percent		42.82%	57.18%	
Count	Yes	11	24	35
Row Percent		31.43%	68.57%	
Count	All Grps	169	235	404

6g

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Approach at angle-both travelling straight	Driver No	Driver Yes	Row Totals
Count	No	161	222	383
Row Percent		42.04%	57.96%	
Count	Yes	8	13	21
Row Percent		38.10%	61.90%	
Count	All Grps	169	235	404

6i

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Turn right in face of uncoming traffic	Driver No	Driver Yes	Row Totals
Count	No	168	225	393
Row Percent		42.75%	57.25%	
Count	Yes	1	10	11
Row Percent		9.09%	90.91%	
Count	All Grps	169	235	404

7a

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Head/Rear end	Male No	Male Yes	Row Totals
Count	no	34	117	151
Row Percent		22.52%	77.48%	
Count	yes	15	56	71
Row Percent		21.13%	78.87%	
Count	All Grps	49	173	222

7b

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sideswipe: same direction	Male No	Male Yes	Row Totals
Count	No	41	144	185
Row Percent		22.16%	77.84%	
Count	Yes	8	29	37
Row Percent		21.62%	78.38%	
Count	All Grps	49	173	222

7c

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sideswipe: opposite directions	Male No	Male Yes	Row Totals
Count	No	46	154	200
Row Percent		23.00%	77.00%	
Count	Yes	3	19	22
Row Percent		13.64%	86.36%	
Count	All Grps	49	173	222

10a

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Negligence	Driver No	Driver Yes	Row Totals
Count	No	132	6	138
Row Percent		95.65%	4.35%	
Count	Yes	37	229	266
Row Percent		13.91%	86.09%	
Count	All Grps	169	235	404

10b

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Driver	Negligence No	Negligence Yes	Row Totals
Count	No	132	37	169
Row Percent		78.11%	21.89%	
Count	Yes	6	229	235
Row Percent		2.55%	97.45%	
Count	All Grps	138	266	404

10c

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Other	Negligence No	Negligence Yes	Row Totals
Count	No	138	232	370
Row Percent		37.30%	62.70%	
Count	Yes	0	34	34
Row Percent		0.00%	100.00%	
Count	All Grps	138	266	404

11a

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Friday	Negligence No	Negligence Yes	Row Totals
Count	No	119	211	330
Row Percent		36.06%	63.94%	
Count	Yes	19	55	74
Row Percent		25.68%	74.32%	
Count	All Grps	138	266	404

11b

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Saturday	Negligence No	Negligence Yes	Row Totals
Count	No	108	225	333
Row Percent		32.43%	67.57%	
Count	Yes	30	41	71
Row Percent		42.25%	57.75%	
Count	All Grps	138	266	404

11c

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Thursday	Negligence No	Negligence Yes	Row Totals
Count	No	120	219	339
Row Percent		35.40%	64.60%	
Count	Yes	18	47	65
Row Percent		27.69%	72.31%	
Count	All Grps	138	266	404

11d

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Monday	Negligence No	Negligence Yes	Row Totals
Count	No	122	232	354
Row Percent		34.46%	65.54%	
Count	Yes	16	34	50
Row Percent		32.00%	68.00%	
Count	All Grps	138	266	404

11e

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Wednesday	Negligence No	Negligence Yes	Row Totals
Count	No	124	231	355
Row Percent		34.93%	65.07%	
Count	Yes	14	35	49
Row Percent		28.57%	71.43%	
Count	All Grps	138	266	404

11f

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Tuesday	Negligence No	Negligence Yes	Row Totals
Count	No	125	238	363
Row Percent		34.44%	65.56%	
Count	Yes	13	28	41
Row Percent		31.71%	68.29%	
Count	All Grps	138	266	404

12a

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour17	Negligence No	Negligence Yes	Row Totals
Count	No	122	241	363
Row Percent		33.61%	66.39%	
Count	Yes	16	25	41
Row Percent		39.02%	60.98%	
Count	All Grps	138	266	404

12b

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour13	Negligence No	Negligence Yes	Row Totals
Count	No	129	242	371
Row Percent		34.77%	65.23%	
Count	Yes	9	24	33
Row Percent		27.27%	72.73%	
Count	All Grps	138	266	404

12c

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour15	Negligence No	Negligence Yes	Row Totals
Count	No	130	246	376
Row Percent		34.57%	65.43%	
Count	Yes	8	20	28
Row Percent		28.57%	71.43%	
Count	All Grps	138	266	404

12d

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour12	Negligence No	Negligence Yes	Row Totals
Count	No	128	250	378
Row Percent		33.86%	66.14%	
Count	Yes	10	16	26
Row Percent		38.46%	61.54%	
Count	All Grps	138	266	404

12e

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour7	Negligence No	Negligence Yes	Row Totals
Count	No	134	246	380
Row Percent		35.26%	64.74%	
Count	Yes	4	20	24
Row Percent		16.67%	83.33%	
Count	All Grps	138	266	404

12f

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour18	Negligence No	Negligence Yes	Row Totals
Count	No	128	252	380
Row Percent		33.68%	66.32%	
Count	Yes	10	14	24
Row Percent		41.67%	58.33%	
Count	All Grps	138	266	404

12g

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour16	Negligence No	Negligence Yes	Row Totals
Count	No	135	248	383
Row Percent		35.25%	64.75%	
Count	Yes	3	18	21
Row Percent		14.29%	85.71%	
Count	All Grps	138	266	404

12h

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour8	Negligence No	Negligence Yes	Row Totals
Count	no	133	251	384
Row Percent		34.64%	65.36%	
Count	yes	5	15	20
Row Percent		25.00%	75.00%	
Count	All Grps	138	266	404

12i

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour14	Negligence No	Negligence Yes	Row Totals
Count	No	132	252	384
Row Percent		34.38%	65.63%	
Count	Yes	6	14	20
Row Percent		30.00%	70.00%	
Count	All Grps	138	266	404

13a

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	daylight	Negligence No	Negligence Yes	Row Totals
Count	no	60	68	128
Row Percent		46.88%	53.13%	
Count	yes	74	196	270
Row Percent		27.41%	72.59%	
Count	All Grps	134	264	398

13b

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Negligence	daylight no	daylight yes	Row Totals
Count	No	60	74	134
Row Percent		44.78%	55.22%	
Count	Yes	68	196	264
Row Percent		25.76%	74.24%	
Count	All Grps	128	270	398

13c

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Night-unlit	Negligence No	Negligence Yes	Row Totals
Count	No	93	217	310
Row Percent		30.00%	70.00%	
Count	Yes	41	47	88
Row Percent		46.59%	53.41%	
Count	All Grps	134	264	398

13d

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	P in road	daylight no	daylight yes	Row Totals
Count	No	112	248	360
Row Percent		31.11%	68.89%	
Count	Yes	16	22	38
Row Percent		42.11%	57.89%	
Count	All Grps	128	270	398

13e

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Unknown cause	daylight no	daylight yes	Row Totals
Count	No	116	248	364
Row Percent		31.87%	68.13%	
Count	Yes	12	22	34
Row Percent		35.29%	64.71%	
Count	All Grps	128	270	398

13g

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Vehicle problem	daylight no	daylight yes	Row Totals
Count	No	120	253	373
Row Percent		32.17%	67.83%	
Count	Yes	8	17	25
Row Percent		32.00%	68.00%	
Count	All Grps	128	270	398

13f

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Animal in road	Night-unlit No	Night-unlit Yes	Row Totals
Count	No	300	76	376
Row Percent		79.79%	20.21%	
Count	Yes	10	12	22
Row Percent		45.45%	54.55%	
Count	All Grps	310	88	398

14a

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Negligence	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	53	84	137
Row Percent		38.69%	61.31%	
Count	Yes	103	158	261
Row Percent		39.46%	60.54%	
Count	All Grps	156	242	398

14b

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Car/Stationw	Negligence No	Negligence Yes	Row Totals
Count	No	53	103	156
Row Percent		33.97%	66.03%	
Count	Yes	84	158	242
Row Percent		34.71%	65.29%	
Count	All Grps	137	261	398

14c

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Light Delivery Vehicle	Negligence No	Negligence Yes	Row Totals
Count	No	108	200	308
Row Percent		35.06%	64.94%	
Count	Yes	29	61	90
Row Percent		32.22%	67.78%	
Count	All Grps	137	261	398

14d

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	P in road	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	147	213	360
Row Percent		40.83%	59.17%	
Count	Yes	9	29	38
Row Percent		23.68%	76.32%	
Count	All Grps	156	242	398

14e

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	GVM>3500kg	Negligence No	Negligence Yes	Row Totals
Count	No	126	246	372
Row Percent		33.87%	66.13%	
Count	Yes	11	15	26
Row Percent		42.31%	57.69%	
Count	All Grps	137	261	398

14f

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Animal in road	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	147	228	375
Row Percent		39.20%	60.80%	
Count	Yes	9	14	23
Row Percent		39.13%	60.87%	
Count	All Grps	156	242	398

15a

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Male	Negligence No	Negligence Yes	Row Totals
Count	No	6	43	49
Row Percent		12.24%	87.76%	
Count	Yes	16	157	173
Row Percent		9.25%	90.75%	
Count	All Grps	22	200	222

15b

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Negligence	Male No	Male Yes	Row Totals
Count	No	6	16	22
Row Percent		27.27%	72.73%	
Count	Yes	43	157	200
Row Percent		21.50%	78.50%	
Count	All Grps	49	173	222

15c

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	female	Negligence No	Negligence Yes	Row Totals
Count	No	16	157	173
Row Percent		9.25%	90.75%	
Count	Yes	6	43	49
Row Percent		12.24%	87.76%	
Count	All Grps	22	200	222

16a

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age21-30	Negligence No	Negligence Yes	Row Totals
Count	No	12	130	142
Row Percent		8.45%	91.55%	
Count	Yes	4	52	56
Row Percent		7.14%	92.86%	
Count	All Grps	16	182	198

16b

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age31-40	Negligence No	Negligence Yes	Row Totals
Count	No	13	136	149
Row Percent		8.72%	91.28%	
Count	Yes	3	46	49
Row Percent		6.12%	93.88%	
Count	All Grps	16	182	198

16c

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age41-50	Negligence No	Negligence Yes	Row Totals
Count	No	15	149	164
Row Percent		9.15%	90.85%	
Count	Yes	1	33	34
Row Percent		2.94%	97.06%	
Count	All Grps	16	182	198

16d

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age51-60	Negligence No	Negligence Yes	Row Totals
Count	No	15	157	172
Row Percent		8.72%	91.28%	
Count	Yes	1	25	26
Row Percent		3.85%	96.15%	
Count	All Grps	16	182	198

16e

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age>60	Negligence No	Negligence Yes	Row Totals
Count	No	15	168	183
Row Percent		8.20%	91.80%	
Count	Yes	1	14	15
Row Percent		6.67%	93.33%	
Count	All Grps	16	182	198

16f

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age<=20	Negligence No	Negligence Yes	Row Totals
Count	No	10	170	180
Row Percent		5.56%	94.44%	
Count	Yes	6	12	18
Row Percent		33.33%	66.67%	
Count	All Grps	16	182	198

17a

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Friday	Driver No	Driver Yes	Row Totals
Count	No	147	183	330
Row Percent		44.55%	55.45%	
Count	Yes	22	52	74
Row Percent		29.73%	70.27%	
Count	All Grps	169	235	404

17b

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Thursday	Driver No	Driver Yes	Row Totals
Count	No	147	192	339
Row Percent		43.36%	56.64%	
Count	Yes	22	43	65
Row Percent		33.85%	66.15%	
Count	All Grps	169	235	404

17c

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Monday	Driver No	Driver Yes	Row Totals
Count	No	148	206	354
Row Percent		41.81%	58.19%	
Count	Yes	21	29	50
Row Percent		42.00%	58.00%	
Count	All Grps	169	235	404

17d

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Wednesday	Driver No	Driver Yes	Row Totals
Count	No	151	204	355
Row Percent		42.54%	57.46%	
Count	Yes	18	31	49
Row Percent		36.73%	63.27%	
Count	All Grps	169	235	404

18a

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour17	Driver No	Driver Yes	Row Totals
Count	No	153	210	363
Row Percent		42.15%	57.85%	
Count	Yes	16	25	41
Row Percent		39.02%	60.98%	
Count	All Grps	169	235	404

18b

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour15	Driver No	Driver Yes	Row Totals
Count	No	159	217	376
Row Percent		42.29%	57.71%	
Count	Yes	10	18	28
Row Percent		35.71%	64.29%	
Count	All Grps	169	235	404

18c

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour13	Driver No	Driver Yes	Row Totals
Count	No	158	213	371
Row Percent		42.59%	57.41%	
Count	Yes	11	22	33
Row Percent		33.33%	66.67%	
Count	All Grps	169	235	404

18d

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour12	Driver No	Driver Yes	Row Totals
Count	No	157	221	378
Row Percent		41.53%	58.47%	
Count	Yes	12	14	26
Row Percent		46.15%	53.85%	
Count	All Grps	169	235	404

18e

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour7	Driver No	Driver Yes	Row Totals
Count	No	162	218	380
Row Percent		42.63%	57.37%	
Count	Yes	7	17	24
Row Percent		29.17%	70.83%	
Count	All Grps	169	235	404

18f

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour8	Driver No	Driver Yes	Row Totals
Count	no	163	221	384
Row Percent		42.45%	57.55%	
Count	yes	6	14	20
Row Percent		30.00%	70.00%	
Count	All Grps	169	235	404

18g

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour14	Driver No	Driver Yes	Row Totals
Count	No	160	224	384
Row Percent		41.67%	58.33%	
Count	Yes	9	11	20
Row Percent		45.00%	55.00%	
Count	All Grps	169	235	404

18h

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour16	Driver No	Driver Yes	Row Totals
Count	No	160	223	383
Row Percent		41.78%	58.22%	
Count	Yes	9	12	21
Row Percent		42.86%	57.14%	
Count	All Grps	169	235	404

19

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	daylight	Driver No	Driver Yes	Row Totals
Count	no	66	62	128
Row Percent		51.56%	48.44%	
Count	yes	99	171	270
Row Percent		36.67%	63.33%	
Count	All Grps	165	233	398

19

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Driver	daylight no	daylight yes	Row Totals
Count	No	66	99	165
Row Percent		40.00%	60.00%	
Count	Yes	62	171	233
Row Percent		26.61%	73.39%	
Count	All Grps	128	270	398

19

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Pedestrian (P at fault)	daylight no	daylight yes	Row Totals
Count	No	111	245	356
Row Percent		31.18%	68.82%	
Count	Yes	17	25	42
Row Percent		40.48%	59.52%	
Count	All Grps	128	270	398

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Unknown at fault	daylight no	daylight yes	Row Totals
Count	No	116	246	362
Row Percent		32.04%	67.96%	
Count	Yes	12	24	36
Row Percent		33.33%	66.67%	
Count	All Grps	128	270	398

19

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Other at fault	daylight no	daylight yes	Row Totals
Count	No	119	245	364
Row Percent		32.69%	67.31%	
Count	Yes	9	25	34
Row Percent		26.47%	73.53%	
Count	All Grps	128	270	398

19

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Vehicle at fault	daylight no	daylight yes	Row Totals
Count	No	120	253	373
Row Percent		32.17%	67.83%	
Count	Yes	8	17	25
Row Percent		32.00%	68.00%	
Count	All Grps	128	270	398

19

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Driver	Male No	Male Yes	Row Totals
Count	No	6	13	19
Row Percent		31.58%	68.42%	
Count	Yes	43	160	203
Row Percent		21.18%	78.82%	
Count	All Grps	49	173	222

21

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Male	Driver No	Driver Yes	Row Totals
Count	No	6	43	49
Row Percent		12.24%	87.76%	
Count	Yes	13	160	173
Row Percent		7.51%	92.49%	
Count	All Grps	19	203	222

21

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	female	Driver No	Driver Yes	Row Totals
Count	No	13	160	173
Row Percent		7.51%	92.49%	
Count	Yes	6	43	49
Row Percent		12.24%	87.76%	
Count	All Grps	19	203	222

21

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age21-30	Driver No	Driver Yes	Row Totals
Count	No	12	130	142
Row Percent		8.45%	91.55%	
Count	Yes	3	53	56
Row Percent		5.36%	94.64%	
Count	All Grps	15	183	198

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age31-40	Driver No	Driver Yes	Row Totals
Count	No	13	136	149
Row Percent		8.72%	91.28%	
Count	Yes	2	47	49
Row Percent		4.08%	95.92%	
Count	All Grps	15	183	198

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age41-50	Driver No	Driver Yes	Row Totals
Count	No	14	150	164
Row Percent		8.54%	91.46%	
Count	Yes	1	33	34
Row Percent		2.94%	97.06%	
Count	All Grps	15	183	198

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age51-60	Driver No	Driver Yes	Row Totals
Count	No	13	159	172
Row Percent		7.56%	92.44%	
Count	Yes	2	24	26
Row Percent		7.69%	92.31%	
Count	All Grps	15	183	198

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age<=20	Driver No	Driver Yes	Row Totals
Count	No	10	170	180
Row Percent		5.56%	94.44%	
Count	Yes	5	13	18
Row Percent		27.78%	72.22%	
Count	All Grps	15	183	198

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age>60	Driver No	Driver Yes	Row Totals
Count	No	13	170	183
Row Percent		7.10%	92.90%	
Count	Yes	2	13	15
Row Percent		13.33%	86.67%	
Count	All Grps	15	183	198

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Friday	daylight no	daylight yes	Row Totals
Count	No	102	222	324
Row Percent		31.48%	68.52%	
Count	Yes	26	48	74
Row Percent		35.14%	64.86%	
Count	All Grps	128	270	398

24

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Saturday	daylight no	daylight yes	Row Totals
Count	No	104	223	327
Row Percent		31.80%	68.20%	
Count	Yes	24	47	71
Row Percent		33.80%	66.20%	
Count	All Grps	128	270	398

24

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Thursday	daylight no	daylight yes	Row Totals
Count	No	107	227	334
Row Percent		32.04%	67.96%	
Count	Yes	21	43	64
Row Percent		32.81%	67.19%	
Count	All Grps	128	270	398

24

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sunday	daylight no	daylight yes	Row Totals
Count	No	104	241	345
Row Percent		30.14%	69.86%	
Count	Yes	24	29	53
Row Percent		45.28%	54.72%	
Count	All Grps	128	270	398

24

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Monday	daylight no	daylight yes	Row Totals
Count	No	117	233	350
Row Percent		33.43%	66.57%	
Count	Yes	11	37	48
Row Percent		22.92%	77.08%	
Count	All Grps	128	270	398

24

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Wednesday	daylight no	daylight yes	Row Totals
Count	No	115	236	351
Row Percent		32.76%	67.24%	
Count	Yes	13	34	47
Row Percent		27.66%	72.34%	
Count	All Grps	128	270	398

24

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Tuesday	daylight no	daylight yes	Row Totals
Count	No	119	238	357
Row Percent		33.33%	66.67%	
Count	Yes	9	32	41
Row Percent		21.95%	78.05%	
Count	All Grps	128	270	398

24

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Friday	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	131	194	325
Row Percent		40.31%	59.69%	
Count	Yes	25	48	73
Row Percent		34.25%	65.75%	
Count	All Grps	156	242	398

24

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Saturday	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	127	200	327
Row Percent		38.84%	61.16%	
Count	Yes	29	42	71
Row Percent		40.85%	59.15%	
Count	All Grps	156	242	398

25

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Thursday	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	130	203	333
Row Percent		39.04%	60.96%	
Count	Yes	26	39	65
Row Percent		40.00%	60.00%	
Count	All Grps	156	242	398

25

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sunday	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	140	206	346
Row Percent		40.46%	59.54%	
Count	Yes	16	36	52
Row Percent		30.77%	69.23%	
Count	All Grps	156	242	398

25

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Monday	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	137	213	350
Row Percent		39.14%	60.86%	
Count	Yes	19	29	48
Row Percent		39.58%	60.42%	
Count	All Grps	156	242	398

25

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Wednesday	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	134	215	349
Row Percent		38.40%	61.60%	
Count	Yes	22	27	49
Row Percent		44.90%	55.10%	
Count	All Grps	156	242	398

25

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Tuesday	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	137	221	358
Row Percent		38.27%	61.73%	
Count	Yes	19	21	40
Row Percent		47.50%	52.50%	
Count	All Grps	156	242	398

25

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Friday	Male No	Male Yes	Row Totals
Count	No	39	133	172
Row Percent		22.67%	77.33%	
Count	Yes	10	40	50
Row Percent		20.00%	80.00%	
Count	All Grps	49	173	222

26

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour17	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	144	214	358
Row Percent		40.22%	59.78%	
Count	Yes	12	28	40
Row Percent		30.00%	70.00%	
Count	All Grps	156	242	398

29

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour13	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	145	221	366
Row Percent		39.62%	60.38%	
Count	Yes	11	21	32
Row Percent		34.38%	65.63%	
Count	All Grps	156	242	398

29

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour15	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	144	226	370
Row Percent		38.92%	61.08%	
Count	Yes	12	16	28
Row Percent		42.86%	57.14%	
Count	All Grps	156	242	398

29

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour12	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	145	227	372
Row Percent		38.98%	61.02%	
Count	Yes	11	15	26
Row Percent		42.31%	57.69%	
Count	All Grps	156	242	398

29

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour18	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	148	226	374
Row Percent		39.57%	60.43%	
Count	Yes	8	16	24
Row Percent		33.33%	66.67%	
Count	All Grps	156	242	398

29

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour7	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	145	229	374
Row Percent		38.77%	61.23%	
Count	Yes	11	13	24
Row Percent		45.83%	54.17%	
Count	All Grps	156	242	398

29

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour14	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	149	229	378
Row Percent		39.42%	60.58%	
Count	Yes	7	13	20
Row Percent		35.00%	65.00%	
Count	All Grps	156	242	398

29

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Male	daylight no	daylight yes	Row Totals
Count	No	6	43	49
Row Percent		12.24%	87.76%	
Count	Yes	53	118	171
Row Percent		30.99%	69.01%	
Count	All Grps	59	161	220

32

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	female	daylight no	daylight yes	Row Totals
Count	No	53	118	171
Row Percent		30.99%	69.01%	
Count	Yes	6	43	49
Row Percent		12.24%	87.76%	
Count	All Grps	59	161	220

32

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age21-30	daylight no	daylight yes	Row Totals
Count	No	36	104	140
Row Percent		25.71%	74.29%	
Count	Yes	17	39	56
Row Percent		30.36%	69.64%	
Count	All Grps	53	143	196

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age31-40	daylight no	daylight yes	Row Totals
Count	No	40	107	147
Row Percent		27.21%	72.79%	
Count	Yes	13	36	49
Row Percent		26.53%	73.47%	
Count	All Grps	53	143	196

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age41-50	daylight no	daylight yes	Row Totals
Count	No	46	116	162
Row Percent		28.40%	71.60%	
Count	Yes	7	27	34
Row Percent		20.59%	79.41%	
Count	All Grps	53	143	196

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age51-60	daylight no	daylight yes	Row Totals
Count	No	44	127	171
Row Percent		25.73%	74.27%	
Count	Yes	9	16	25
Row Percent		36.00%	64.00%	
Count	All Grps	53	143	196

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age>60	daylight no	daylight yes	Row Totals
Count	No	52	130	182
Row Percent		28.57%	71.43%	
Count	Yes	1	13	14
Row Percent		7.14%	92.86%	
Count	All Grps	53	143	196

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age<=20	daylight no	daylight yes	Row Totals
Count	No	47	131	178
Row Percent		26.40%	73.60%	
Count	Yes	6	12	18
Row Percent		33.33%	66.67%	
Count	All Grps	53	143	196

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1) 12
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour11	Negligence No	Negligence Yes	Row Totals
Count	No	131	254	385
Row Percent		34.03%	65.97%	
Count	Yes	7	12	19
Row Percent		36.84%	63.16%	
Count	All Grps	138	266	404

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1) 12
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour9	Negligence No	Negligence Yes	Row Totals
Count	No	134	252	386
Row Percent		34.72%	65.28%	
Count	Yes	4	14	18
Row Percent		22.22%	77.78%	
Count	All Grps	138	266	404

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1) 12
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour19	Negligence No	Negligence Yes	Row Totals
Count	No	130	258	388
Row Percent		33.51%	66.49%	
Count	Yes	8	8	16
Row Percent		50.00%	50.00%	
Count	All Grps	138	266	404

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1) 12
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour10	Negligence No	Negligence Yes	Row Totals
Count	No	135	254	389
Row Percent		34.70%	65.30%	
Count	Yes	3	12	15
Row Percent		20.00%	80.00%	
Count	All Grps	138	266	404

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1) 12
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour20	Negligence No	Negligence Yes	Row Totals
Count	No	133	258	391
Row Percent		34.02%	65.98%	
Count	Yes	5	8	13
Row Percent		38.46%	61.54%	
Count	All Grps	138	266	404

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1) 12
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour5	Negligence No	Negligence Yes	Row Totals
Count	No	135	258	393
Row Percent		34.35%	65.65%	
Count	Yes	3	8	11
Row Percent		27.27%	72.73%	
Count	All Grps	138	266	404

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

13

	Night-lit by streetlights	Negligence No	Negligence Yes	Row Totals
Count	No	124	253	377
Row Percent		32.89%	67.11%	
Count	Yes	10	11	21
Row Percent		47.62%	52.38%	
Count	All Grps	134	264	398

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

13

	Dawn/Dusk	Negligence No	Negligence Yes	Row Totals
Count	No	126	255	381
Row Percent		33.07%	66.93%	
Count	Yes	8	9	17
Row Percent		47.06%	52.94%	
Count	All Grps	134	264	398

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

14

	Other Vehicle Tp	Negligence No	Negligence Yes	Row Totals
Count	No	135	251	386
Row Percent		34.97%	65.03%	
Count	Yes	2	10	12
Row Percent		16.67%	83.33%	
Count	All Grps	137	261	398

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

17

	Tuesday	Driver No	Driver Yes	Row Totals
Count	No	149	214	363
Row Percent		41.05%	58.95%	
Count	Yes	20	21	41
Row Percent		48.78%	51.22%	
Count	All Grps	169	235	404

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

18

	hour11	Driver No	Driver Yes	Row Totals
Count	No	161	224	385
Row Percent		41.82%	58.18%	
Count	Yes	8	11	19
Row Percent		42.11%	57.89%	
Count	All Grps	169	235	404

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

18

	hour9	Driver No	Driver Yes	Row Totals
Count	No	164	222	386
Row Percent		42.49%	57.51%	
Count	Yes	5	13	18
Row Percent		27.78%	72.22%	
Count	All Grps	169	235	404

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour10	Driver No	Driver Yes	Row Totals
Count	No	164	225	389
Row Percent		42.16%	57.84%	
Count	Yes	5	10	15
Row Percent		33.33%	66.67%	
Count	All Grps	169	235	404

18

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour20	Driver No	Driver Yes	Row Totals
Count	No	164	227	391
Row Percent		41.94%	58.06%	
Count	Yes	5	8	13
Row Percent		38.46%	61.54%	
Count	All Grps	169	235	404

18

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour19	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	153	229	382
Row Percent		40.05%	59.95%	
Count	Yes	3	13	16
Row Percent		18.75%	81.25%	
Count	All Grps	156	242	398

29

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour20	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	154	231	385
Row Percent		40.00%	60.00%	
Count	Yes	2	11	13
Row Percent		15.38%	84.62%	
Count	All Grps	156	242	398

29

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour22	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	153	233	386
Row Percent		39.64%	60.36%	
Count	Yes	3	9	12
Row Percent		25.00%	75.00%	
Count	All Grps	156	242	398

29

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour21	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	153	233	386
Row Percent		39.64%	60.36%	
Count	Yes	3	9	12
Row Percent		25.00%	75.00%	
Count	All Grps	156	242	398

29

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

29

	hour5	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	152	235	387
Row Percent		39.28%	60.72%	
Count	Yes	4	7	11
Row Percent		36.36%	63.64%	
Count	All Grps	156	242	398

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

30

	hour9	Male No	Male Yes	Row Totals
Count	No	46	164	210
Row Percent		21.90%	78.10%	
Count	Yes	3	9	12
Row Percent		25.00%	75.00%	
Count	All Grps	49	173	222

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

30

	hour20	Male No	Male Yes	Row Totals
Count	No	49	165	214
Row Percent		22.90%	77.10%	
Count	Yes	0	8	8
Row Percent		0.00%	100.00%	
Count	All Grps	49	173	222

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

30

	hour22	Male No	Male Yes	Row Totals
Count	No	49	167	216
Row Percent		22.69%	77.31%	
Count	Yes	0	6	6
Row Percent		0.00%	100.00%	

Summary Frequency Table (data 2004-06-11.sta in data en voorbeelde1)
Marked cells have counts > 10
(Marginal summaries are not marked)

30

	hour5	Male No	Male Yes	Row Totals
Count	No	49	167	216
Row Percent		22.69%	77.31%	
Count	Yes	0	6	6
Row Percent		0.00%	100.00%	
Count	All Grps	49	173	222

2a

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour13	Single Vehicle overturned No	Single Vehicle overturned Yes	Row Totals
Count	No	115	33	148
Row Percent		77.70%	22.30%	
Count	Yes	6	6	12
Row Percent		50.00%	50.00%	
Count	All Grps	121	39	160

2b

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour15	Accident with pedestrian No	Accident with pedestrian Yes	Row Totals
Count	No	113	37	150
Row Percent		75.33%	24.67%	
Count	Yes	5	5	10
Row Percent		50.00%	50.00%	
Count	All Grps	118	42	160

2c

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour18	Accident with pedestrian No	Accident with pedestrian Yes	Row Totals
Count	No	112	36	148
Row Percent		75.68%	24.32%	
Count	Yes	6	6	12
Row Percent		50.00%	50.00%	
Count	All Grps	118	42	160

3a

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Accident with pedestrian	daylight no	daylight yes	Row Totals
Count	No	63	52	115
Row Percent		54.78%	45.22%	
Count	Yes	13	28	41
Row Percent		31.71%	68.29%	
Count	All Grps	76	80	156

3b

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Accident with fixed object	daylight no	daylight yes	Row Totals
Count	No	56	60	116
Row Percent		48.28%	51.72%	
Count	Yes	20	20	40
Row Percent		50.00%	50.00%	
Count	All Grps	76	80	156

3c

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Accident with animal	Night-unlit No	Night-unlit Yes	Row Totals
Count	No	91	48	139
Row Percent		65.47%	34.53%	
Count	Yes	7	10	17
Row Percent		41.18%	58.82%	
Count	All Grps	98	58	156

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

4a

	Accident with pedestrian	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	42	74	116
Row Percent		36.21%	63.79%	
Count	Yes	12	29	41
Row Percent		29.27%	70.73%	
Count	All Grps	54	103	157

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

4b

	Accident with fixed object	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	40	78	118
Row Percent		33.90%	66.10%	
Count	Yes	14	25	39
Row Percent		35.90%	64.10%	
Count	All Grps	54	103	157

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

4c

	Single Vehicle overturned	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	39	79	118
Row Percent		33.05%	66.95%	
Count	Yes	15	24	39
Row Percent		38.46%	61.54%	
Count	All Grps	54	103	157

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

4d

	Other: Vehicle left road	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	48	89	137
Row Percent		35.04%	64.96%	
Count	Yes	6	14	20
Row Percent		30.00%	70.00%	
Count	All Grps	54	103	157

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

4e

	Accident with animal	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	47	92	139
Row Percent		33.81%	66.19%	
Count	Yes	7	11	18
Row Percent		38.89%	61.11%	
Count	All Grps	54	103	157

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

4f

	GVM>3500kg	Single Vehicle overturned No	Single Vehicle overturned Yes	Row Totals
Count	No	113	34	147
Row Percent		76.87%	23.13%	
Count	Yes	5	5	10
Row Percent		50.00%	50.00%	
Count	All Grps	118	39	157

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Accident with pedestrian	P in road (cause) No	P in road (cause) Yes	Row Totals
Count	No	112	6	118
Row Percent		94.92%	5.08%	
Count	Yes	10	32	42
Row Percent		23.81%	76.19%	
Count	All Grps	122	38	160

5a

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Accident with fixed object	Negligence No	Negligence Yes	Row Totals
Count	No	87	33	120
Row Percent		72.50%	27.50%	
Count	Yes	15	25	40
Row Percent		37.50%	62.50%	
Count	All Grps	102	58	160

5b

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Vehicle problem	Single Vehicle overturned No	Single Vehicle overturned Yes	Row Totals
Count	No	113	28	141
Row Percent		80.14%	19.86%	
Count	Yes	8	11	19
Row Percent		42.11%	57.89%	
Count	All Grps	121	39	160

5e

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Unknown cause	Single Vehicle overturned No	Single Vehicle overturned Yes	Row Totals
Count	No	114	32	146
Row Percent		78.08%	21.92%	
Count	Yes	7	7	14
Row Percent		50.00%	50.00%	
Count	All Grps	121	39	160

5g

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Wednesday	Negligence No	Negligence Yes	Row Totals
Count	No	92	46	138
Row Percent		66.67%	33.33%	
Count	Yes	10	12	22
Row Percent		45.45%	54.55%	
Count	All Grps	102	58	160

11a

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Negligence	daylight no	daylight yes	Row Totals
Count	No	50	48	98
Row Percent		51.02%	48.98%	
Count	Yes	26	32	58
Row Percent		44.83%	55.17%	
Count	All Grps	76	80	156

13a

13b

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	P in road (cause)	daylight no	daylight yes	Row Totals
Count	No	61	58	119
Row Percent		51.26%	48.74%	
Count	Yes	15	22	37
Row Percent		40.54%	59.46%	
Count	All Grps	76	80	156

13c

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Animal in road	Night-unlit No	Night-unlit Yes	Row Totals
Count	No	88	46	134
Row Percent		65.67%	34.33%	
Count	Yes	10	12	22
Row Percent		45.45%	54.55%	
Count	All Grps	98	58	156

13d

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Vehicle problem	daylight no	daylight yes	Row Totals
Count	No	69	69	138
Row Percent		50.00%	50.00%	
Count	Yes	7	11	18
Row Percent		38.89%	61.11%	
Count	All Grps	76	80	156

13e

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Unknown cause	Night-unlit No	Night-unlit Yes	Row Totals
Count	No	92	51	143
Row Percent		64.34%	35.66%	
Count	Yes	6	7	13
Row Percent		46.15%	53.85%	
Count	All Grps	98	58	156

14a

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Negligence	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	32	69	101
Row Percent		31.68%	68.32%	
Count	Yes	22	34	56
Row Percent		39.29%	60.71%	
Count	All Grps	54	103	157

14b

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	P in road (cause)	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	45	75	120
Row Percent		37.50%	62.50%	
Count	Yes	9	28	37
Row Percent		24.32%	75.68%	
Count	All Grps	54	103	157

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

14c

	Accident w ith animal	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	47	92	139
Row Percent		33.81%	66.19%	
Count	Yes	7	11	18
Row Percent		38.89%	61.11%	
Count	All Grps	54	103	157

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

14d

	Unknow n cause	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	50	93	143
Row Percent		34.97%	65.03%	
Count	Yes	4	10	14
Row Percent		28.57%	71.43%	
Count	All Grps	54	103	157

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

15a

	Negligence	Male No	Male Yes	Row Totals
Count	No	6	14	20
Row Percent		30.00%	70.00%	
Count	Yes	9	34	43
Row Percent		20.93%	79.07%	
Count	All Grps	15	48	63

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

15b

	Male	Negligence No	Negligence Yes	Row Totals
Count	No	6	9	15
Row Percent		40.00%	60.00%	
Count	Yes	14	34	48
Row Percent		29.17%	70.83%	
Count	All Grps	20	43	63

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

15c

	female	Negligence No	Negligence Yes	Row Totals
Count	No	14	34	48
Row Percent		29.17%	70.83%	
Count	Yes	6	9	15
Row Percent		40.00%	60.00%	
Count	All Grps	20	43	63

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

16a

	Age21-30	Negligence No	Negligence Yes	Row Totals
Count	No	12	25	37
Row Percent		32.43%	67.57%	
Count	Yes	3	12	15
Row Percent		20.00%	80.00%	
Count	All Grps	15	37	52

16b

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age31-40	Negligence No	Negligence Yes	Row Totals
Count	No	12	28	40
Row Percent		30.00%	70.00%	
Count	Yes	3	9	12
Row Percent		25.00%	75.00%	
Count	All Grps	15	37	52

17

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Wednesday	Driver No	Driver Yes	Row Totals
Count	No	101	37	138
Row Percent		73.19%	26.81%	
Count	Yes	11	11	22
Row Percent		50.00%	50.00%	
Count	All Grps	112	48	160

18

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour18	Pedestrian (Pat fault) No	Pedestrian (Pat fault) Yes	Row Totals
Count	No	113	35	148
Row Percent		76.35%	23.65%	
Count	Yes	6	6	12
Row Percent		50.00%	50.00%	
Count	All Grps	119	41	160

19a

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Driver	daylight no	daylight yes	Row Totals
Count	No	53	55	108
Row Percent		49.07%	50.93%	
Count	Yes	23	25	48
Row Percent		47.92%	52.08%	
Count	All Grps	76	80	156

19b

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Pedestrian (Pat fault)	daylight no	daylight yes	Row Totals
Count	No	60	56	116
Row Percent		51.72%	48.28%	
Count	Yes	16	24	40
Row Percent		40.00%	60.00%	
Count	All Grps	76	80	156

19c

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Animal	Night-unlit No	Night-unlit Yes	Row Totals
Count	No	88	46	134
Row Percent		65.67%	34.33%	
Count	Yes	10	12	22
Row Percent		45.45%	54.55%	
Count	All Grps	98	58	156

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

19d

	Vehicle at fault	daylight no	daylight yes	Row Totals
Count	No	69	69	138
Row Percent		50.00%	50.00%	
Count	Yes	7	11	18
Row Percent		38.89%	61.11%	
Count	All Grps	76	80	156

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

19e

	Unknown at fault	Night-unlit No	Night-unlit Yes	Row Totals
Count	No	92	51	143
Row Percent		64.34%	35.66%	
Count	Yes	6	7	13
Row Percent		46.15%	53.85%	
Count	All Grps	98	58	156

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

19f

	Other at fault	daylight no	daylight yes	Row Totals
Count	No	72	72	144
Row Percent		50.00%	50.00%	
Count	Yes	4	8	12
Row Percent		33.33%	66.67%	
Count	All Grps	76	80	156

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

20a

	Driver	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	37	73	110
Row Percent		33.64%	66.36%	
Count	Yes	17	30	47
Row Percent		36.17%	63.83%	
Count	All Grps	54	103	157

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

20b

	Pedestrian (P at fault)	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	45	72	117
Row Percent		38.46%	61.54%	
Count	Yes	9	31	40
Row Percent		22.50%	77.50%	
Count	All Grps	54	103	157

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

20c

	Animal	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	45	89	134
Row Percent		33.58%	66.42%	
Count	Yes	9	14	23
Row Percent		39.13%	60.87%	
Count	All Grps	54	103	157

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

20d

	Unknown at fault	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	50	93	143
Row Percent		34.97%	65.03%	
Count	Yes	4	10	14
Row Percent		28.57%	71.43%	
Count	All Grps	54	103	157

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

20e

	Other at fault	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	49	97	146
Row Percent		33.56%	66.44%	
Count	Yes	5	6	11
Row Percent		45.45%	54.55%	
Count	All Grps	54	103	157

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

21a

	Male	Driver No	Driver Yes	Row Totals
Count	No	6	9	15
Row Percent		40.00%	60.00%	
Count	Yes	11	37	48
Row Percent		22.92%	77.08%	
Count	All Grps	17	46	63

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

21b

	Driver	Male No	Male Yes	Row Totals
Count	No	6	11	17
Row Percent		35.29%	64.71%	
Count	Yes	9	37	46
Row Percent		19.57%	80.43%	
Count	All Grps	15	48	63

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

21c

	female	Driver No	Driver Yes	Row Totals
Count	No	11	37	48
Row Percent		22.92%	77.08%	
Count	Yes	6	9	15
Row Percent		40.00%	60.00%	
Count	All Grps	17	46	63

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

22a

	Age21-30	Driver No	Driver Yes	Row Totals
Count	No	10	27	37
Row Percent		27.03%	72.97%	
Count	Yes	3	12	15
Row Percent		20.00%	80.00%	
Count	All Grps	13	39	52

22b

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age31-40	Driver No	Driver Yes	Row Totals
Count	No	11	29	40
Row Percent		27.50%	72.50%	
Count	Yes	2	10	12
Row Percent		16.67%	83.33%	
Count	All Grps	13	39	52

24a

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Friday	Night-unlit No	Night-unlit Yes	Row Totals
Count	No	84	46	130
Row Percent		64.62%	35.38%	
Count	Yes	13	13	26
Row Percent		50.00%	50.00%	
Count	All Grps	97	59	156

24b

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Thursday	Night-unlit No	Night-unlit Yes	Row Totals
Count	No	87	48	135
Row Percent		64.44%	35.56%	
Count	Yes	10	11	21
Row Percent		47.62%	52.38%	
Count	All Grps	97	59	156

24c

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Wednesday	daylight no	daylight yes	Row Totals
Count	No	67	68	135
Row Percent		49.63%	50.37%	
Count	Yes	9	12	21
Row Percent		42.86%	57.14%	
Count	All Grps	76	80	156

24d

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Tuesday	daylight no	daylight yes	Row Totals
Count	No	70	69	139
Row Percent		50.36%	49.64%	
Count	Yes	6	11	17
Row Percent		35.29%	64.71%	
Count	All Grps	76	80	156

24e

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Monday	daylight no	daylight yes	Row Totals
Count	No	74	70	144
Row Percent		51.39%	48.61%	
Count	Yes	2	10	12
Row Percent		16.67%	83.33%	
Count	All Grps	76	80	156

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sunday	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	45	82	127
Row Percent		35.43%	64.57%	
Count	Yes	9	21	30
Row Percent		30.00%	70.00%	
Count	All Grps	54	103	157

25a

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Saturday	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	42	86	128
Row Percent		32.81%	67.19%	
Count	Yes	12	17	29
Row Percent		41.38%	58.62%	
Count	All Grps	54	103	157

25b

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Friday	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	49	83	132
Row Percent		37.12%	62.88%	
Count	Yes	5	20	25
Row Percent		20.00%	80.00%	
Count	All Grps	54	103	157

25c

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Thursday	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	48	87	135
Row Percent		35.56%	64.44%	
Count	Yes	6	16	22
Row Percent		27.27%	72.73%	
Count	All Grps	54	103	157

25d

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Wednesday	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	45	90	135
Row Percent		33.33%	66.67%	
Count	Yes	9	13	22
Row Percent		40.91%	59.09%	
Count	All Grps	54	103	157

25e

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Tuesday	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	47	93	140
Row Percent		33.57%	66.43%	
Count	Yes	7	10	17
Row Percent		41.18%	58.82%	
Count	All Grps	54	103	157

25f

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

27

	Age31-40	Wednesday No	Wednesday Yes	Row Totals
Count	No	35	5	40
Row Percent		87.50%	12.50%	
Count	Yes	6	6	12
Row Percent		50.00%	50.00%	
Count	All Grps	41	11	52

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

29a

	hour13	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	51	95	146
Row Percent		34.93%	65.07%	
Count	Yes	3	8	11
Row Percent		27.27%	72.73%	
Count	All Grps	54	103	157

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

29b

	hour18	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	51	94	145
Row Percent		35.17%	64.83%	
Count	Yes	3	9	12
Row Percent		25.00%	75.00%	
Count	All Grps	54	103	157

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

29c

	hour21	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	51	95	146
Row Percent		34.93%	65.07%	
Count	Yes	3	8	11
Row Percent		27.27%	72.73%	
Count	All Grps	54	103	157

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

29d

	hour15	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	50	97	147
Row Percent		34.01%	65.99%	
Count	Yes	4	6	10
Row Percent		40.00%	60.00%	
Count	All Grps	54	103	157

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

32

	female	daylight no	daylight yes	Row Totals
Count	No	26	22	48
Row Percent		54.17%	45.83%	
Count	Yes	2	13	15
Row Percent		13.33%	86.67%	
Count	All Grps	28	35	63

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

33

	Age31-40	daylight no	daylight yes	Row Totals
Count	No	20	20	40
Row Percent		50.00%	50.00%	
Count	Yes	3	9	12
Row Percent		25.00%	75.00%	
Count	All Grps	23	29	52

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

6a

	Accident with pedestrian	Pedestrian (P at fault) No	Pedestrian (P at fault) Yes	Row Totals
Count	No	112	6	118
Row Percent		94.92%	5.08%	
Count	Yes	7	35	42
Row Percent		16.67%	83.33%	
Count	All Grps	119	41	160

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

6b

	Pedestrian (P at fault)	Accident with pedestrian No	Accident with pedestrian Yes	Row Totals
Count	No	112	7	119
Row Percent		94.12%	5.88%	
Count	Yes	6	35	41
Row Percent		14.63%	85.37%	
Count	All Grps	118	42	160

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

6c

	Animal	Accident with animal No	Accident with animal Yes	Row Totals
Count	No	137	0	137
Row Percent		100.00%	0.00%	
Count	Yes	5	18	23
Row Percent		21.74%	78.26%	
Count	All Grps	142	18	160

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

6d

	Vehicle at fault	Single Vehicle overturned No	Single Vehicle overturned Yes	Row Totals
Count	No	113	28	141
Row Percent		80.14%	19.86%	
Count	Yes	8	11	19
Row Percent		42.11%	57.89%	
Count	All Grps	121	39	160

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

6f

	Unknown at fault	Single Vehicle overturned No	Single Vehicle overturned Yes	Row Totals
Count	No	114	32	146
Row Percent		78.08%	21.92%	
Count	Yes	7	7	14
Row Percent		50.00%	50.00%	
Count	All Grps	121	39	160

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Other at fault	Accident with fixed object No	Accident with fixed object Yes	Row Totals
Count	No	115	33	148
Row Percent		77.70%	22.30%	
Count	Yes	5	7	12
Row Percent		41.67%	58.33%	
Count	All Grps	120	40	160

6g

Summary Frequency Table (Spreadsheet3 in Enkel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Negligence	Driver No	Driver Yes	Row Totals
Count	No	99	3	102
Row Percent		97.06%	2.94%	
Count	Yes	13	45	58
Row Percent		22.41%	77.59%	
Count	All Grps	112	48	160

10a

1a

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Thursday	Head/Rear end no	Head/Rear end yes	Row Totals
Count	No	120	81	201
Row Percent		59.70%	40.30%	
Count	Yes	21	22	43
Row Percent		48.84%	51.16%	
Count	All Grps	141	103	244

1b

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Wednesday	Head/Rear end no	Head/Rear end yes	Row Totals
Count	No	130	87	217
Row Percent		59.91%	40.09%	
Count	Yes	11	16	27
Row Percent		40.74%	59.26%	
Count	All Grps	141	103	244

2a

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour13	Head/Rear end no	Head/Rear end yes	Row Totals
Count	No	131	91	222
Row Percent		59.01%	40.99%	
Count	Yes	9	12	21
Row Percent		42.86%	57.14%	
Count	All Grps	140	103	243

2b

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour8	Head/Rear end no	Head/Rear end yes	Row Totals
Count	no	134	93	227
Row Percent		59.03%	40.97%	
Count	yes	6	10	16
Row Percent		37.50%	62.50%	
Count	All Grps	140	103	243

2c

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour9	Sideswipe: same direction No	Sideswipe: same direction Yes	Row Totals
Count	No	184	47	231
Row Percent		79.65%	20.35%	
Count	Yes	4	8	12
Row Percent		33.33%	66.67%	
Count	All Grps	188	55	243

2d

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour11	Head/Rear end no	Head/Rear end yes	Row Totals
Count	No	135	96	231
Row Percent		58.44%	41.56%	
Count	Yes	5	7	12
Row Percent		41.67%	58.33%	
Count	All Grps	140	103	243

2e

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour18	Head/Rear end no	Head/Rear end yes	Row Totals
Count	No	134	97	231
Row Percent		58.01%	41.99%	
Count	Yes	6	6	12
Row Percent		50.00%	50.00%	
Count	All Grps	140	103	243

2f

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour10	Head/Rear end no	Head/Rear end yes	Row Totals
Count	No	134	97	231
Row Percent		58.01%	41.99%	
Count	Yes	6	6	12
Row Percent		50.00%	50.00%	
Count	All Grps	140	103	243

3a

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Head/Rear end	daylight no	daylight yes	Row Totals
Count	no	37	102	139
Row Percent		26.62%	73.38%	
Count	yes	15	88	103
Row Percent		14.56%	85.44%	
Count	All Grps	52	190	242

3b

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sideswipe: same direction	daylight no	daylight yes	Row Totals
Count	No	47	140	187
Row Percent		25.13%	74.87%	
Count	Yes	5	50	55
Row Percent		9.09%	90.91%	
Count	All Grps	52	190	242

3c

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sideswipe: opposite directions	daylight no	daylight yes	Row Totals
Count	No	38	169	207
Row Percent		18.36%	81.64%	
Count	Yes	14	21	35
Row Percent		40.00%	60.00%	
Count	All Grps	52	190	242

3d

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Approach at angle-both travelling straight	daylight no	daylight yes	Row Totals
Count	No	42	179	221
Row Percent		19.00%	81.00%	
Count	Yes	10	11	21
Row Percent		47.62%	52.38%	
Count	All Grps	52	190	242

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Turn right in face of uncoming traffic	daylight no	daylight yes	Row Totals
Count	No	49	182	231
Row Percent		21.21%	78.79%	
Count	Yes	3	8	11
Row Percent		27.27%	72.73%	
Count	All Grps	52	190	242

3e

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Head/Rear end	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	no	54	85	139
Row Percent		38.85%	61.15%	
Count	yes	48	54	102
Row Percent		47.06%	52.94%	
Count	All Grps	102	139	241

4a

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sideswipe: same direction	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	83	104	187
Row Percent		44.39%	55.61%	
Count	Yes	19	35	54
Row Percent		35.19%	64.81%	
Count	All Grps	102	139	241

4b

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sideswipe: opposite directions	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	87	119	206
Row Percent		42.23%	57.77%	
Count	Yes	15	20	35
Row Percent		42.86%	57.14%	
Count	All Grps	102	139	241

4c

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Approach at angle-both travelling straight	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	94	126	220
Row Percent		42.73%	57.27%	
Count	Yes	8	13	21
Row Percent		38.10%	61.90%	
Count	All Grps	102	139	241

4d

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Turn right in face of uncoming traffic	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	98	132	230
Row Percent		42.61%	57.39%	
Count	Yes	4	7	11
Row Percent		36.36%	63.64%	
Count	All Grps	102	139	241

4e

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

4f

	Light Delivery Vehicle	Head/Rear end no	Head/Rear end yes	Row Totals
Count	No	113	70	183
Row Percent		61.75%	38.25%	
Count	Yes	26	32	58
Row Percent		44.83%	55.17%	
Count	All Grps	139	102	241

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

5a

	Head/Rear end	Negligence No	Negligence Yes	Row Totals
Count	no	24	117	141
Row Percent		17.02%	82.98%	
Count	yes	12	91	103
Row Percent		11.65%	88.35%	
Count	All Grps	36	208	244

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

5b

	Sideswipe: same direction	Negligence No	Negligence Yes	Row Totals
Count	No	30	158	188
Row Percent		15.96%	84.04%	
Count	Yes	6	50	56
Row Percent		10.71%	89.29%	
Count	All Grps	36	208	244

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

5c

	Sideswipe: opposite directions	Negligence No	Negligence Yes	Row Totals
Count	No	30	179	209
Row Percent		14.35%	85.65%	
Count	Yes	6	29	35
Row Percent		17.14%	82.86%	
Count	All Grps	36	208	244

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

5d

	Approach at angle-both travelling straight	Negligence No	Negligence Yes	Row Totals
Count	No	30	193	223
Row Percent		13.45%	86.55%	
Count	Yes	6	15	21
Row Percent		28.57%	71.43%	
Count	All Grps	36	208	244

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

5e

	Turn right in face of uncoming traffic	Negligence No	Negligence Yes	Row Totals
Count	No	35	198	233
Row Percent		15.02%	84.98%	
Count	Yes	1	10	11
Row Percent		9.09%	90.91%	
Count	All Grps	36	208	244

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Head/Rear end	Driver No	Driver Yes	Row Totals
Count	no	37	104	141
Row Percent		26.24%	73.76%	
Count	yes	20	83	103
Row Percent		19.42%	80.58%	
Count	All Grps	57	187	244

6a

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sideswipe: same direction	Driver No	Driver Yes	Row Totals
Count	No	46	142	188
Row Percent		24.47%	75.53%	
Count	Yes	11	45	56
Row Percent		19.64%	80.36%	
Count	All Grps	57	187	244

6b

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sideswipe: opposite directions	Driver No	Driver Yes	Row Totals
Count	No	46	163	209
Row Percent		22.01%	77.99%	
Count	Yes	11	24	35
Row Percent		31.43%	68.57%	
Count	All Grps	57	187	244

6c

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Approach at angle-both travelling straight	Driver No	Driver Yes	Row Totals
Count	No	49	174	223
Row Percent		21.97%	78.03%	
Count	Yes	8	13	21
Row Percent		38.10%	61.90%	
Count	All Grps	57	187	244

6d

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Turn right in face of uncoming traffic	Driver No	Driver Yes	Row Totals
Count	No	56	177	233
Row Percent		24.03%	75.97%	
Count	Yes	1	10	11
Row Percent		9.09%	90.91%	
Count	All Grps	57	187	244

6e

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Head/Rear end	Male No	Male Yes	Row Totals
Count	no	19	70	89
Row Percent		21.35%	78.65%	
Count	yes	15	55	70
Row Percent		21.43%	78.57%	
Count	All Grps	34	125	159

7a

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

7b

	Sideswipe: same direction	Male No	Male Yes	Row Totals
Count	No	26	96	122
Row Percent		21.31%	78.69%	
Count	Yes	8	29	37
Row Percent		21.62%	78.38%	
Count	All Grps	34	125	159

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

7c

	Sideswipe: opposite directions	Male No	Male Yes	Row Totals
Count	No	31	106	137
Row Percent		22.63%	77.37%	
Count	Yes	3	19	22
Row Percent		13.64%	86.36%	
Count	All Grps	34	125	159

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

8a

	Age21-30	Head/Rear end no	Head/Rear end yes	Row Totals
Count	No	60	45	105
Row Percent		57.14%	42.86%	
Count	Yes	20	21	41
Row Percent		48.78%	51.22%	
Count	All Grps	80	66	146

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

8b

	Age51-60	Head/Rear end no	Head/Rear end yes	Row Totals
Count	No	69	57	126
Row Percent		54.76%	45.24%	
Count	Yes	11	9	20
Row Percent		55.00%	45.00%	
Count	All Grps	80	66	146

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

10a

	Negligence	Driver No	Driver Yes	Row Totals
Count	No	33	3	36
Row Percent		91.67%	8.33%	
Count	Yes	24	184	208
Row Percent		11.54%	88.46%	
Count	All Grps	57	187	244

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

10b

	Driver	Negligence No	Negligence Yes	Row Totals
Count	No	33	24	57
Row Percent		57.89%	42.11%	
Count	Yes	3	184	187
Row Percent		1.60%	98.40%	
Count	All Grps	36	208	244

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Friday	Negligence No	Negligence Yes	Row Totals
Count	No	33	163	196
Row Percent		16.84%	83.16%	
Count	Yes	3	45	48
Row Percent		6.25%	93.75%	
Count	All Grps	36	208	244

11a

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Thursday	Negligence No	Negligence Yes	Row Totals
Count	No	30	171	201
Row Percent		14.93%	85.07%	
Count	Yes	6	37	43
Row Percent		13.95%	86.05%	
Count	All Grps	36	208	244

11b

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Saturday	Negligence No	Negligence Yes	Row Totals
Count	No	27	175	202
Row Percent		13.37%	86.63%	
Count	Yes	9	33	42
Row Percent		21.43%	78.57%	
Count	All Grps	36	208	244

11c

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Monday	Negligence No	Negligence Yes	Row Totals
Count	No	30	178	208
Row Percent		14.42%	85.58%	
Count	Yes	6	30	36
Row Percent		16.67%	83.33%	
Count	All Grps	36	208	244

11d

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Wednesday	Negligence No	Negligence Yes	Row Totals
Count	No	32	185	217
Row Percent		14.75%	85.25%	
Count	Yes	4	23	27
Row Percent		14.81%	85.19%	
Count	All Grps	36	208	244

11e

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Tuesday	Negligence No	Negligence Yes	Row Totals
Count	No	33	187	220
Row Percent		15.00%	85.00%	
Count	Yes	3	21	24
Row Percent		12.50%	87.50%	
Count	All Grps	36	208	244

11f

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sunday	Negligence No	Negligence Yes	Row Totals
Count	No	31	189	220
Row Percent		14.09%	85.91%	
Count	Yes	5	19	24
Row Percent		20.83%	79.17%	
Count	All Grps	36	208	244

11g

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour17	Negligence No	Negligence Yes	Row Totals
Count	No	28	183	211
Row Percent		13.27%	86.73%	
Count	Yes	8	24	32
Row Percent		25.00%	75.00%	
Count	All Grps	36	207	243

12a

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour13	Negligence No	Negligence Yes	Row Totals
Count	No	34	188	222
Row Percent		15.32%	84.68%	
Count	Yes	2	19	21
Row Percent		9.52%	90.48%	
Count	All Grps	36	207	243

12b

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour7	Negligence No	Negligence Yes	Row Totals
Count	No	35	189	224
Row Percent		15.63%	84.38%	
Count	Yes	1	18	19
Row Percent		5.26%	94.74%	
Count	All Grps	36	207	243

12c

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour15	Negligence No	Negligence Yes	Row Totals
Count	No	36	189	225
Row Percent		16.00%	84.00%	
Count	Yes	0	18	18
Row Percent		0.00%	100.00%	
Count	All Grps	36	207	243

12d

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour12	Negligence No	Negligence Yes	Row Totals
Count	No	30	195	225
Row Percent		13.33%	86.67%	
Count	Yes	6	12	18
Row Percent		33.33%	66.67%	
Count	All Grps	36	207	243

12e

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

12

	hour16	Negligence No	Negligence Yes	Row Totals
Count	No	34	192	226
Row Percent		15.04%	84.96%	
Count	Yes	2	15	17
Row Percent		11.76%	88.24%	
Count	All Grps	36	207	243

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

12g

	hour14	Negligence No	Negligence Yes	Row Totals
Count	No	35	195	230
Row Percent		15.22%	84.78%	
Count	Yes	1	12	13
Row Percent		7.69%	92.31%	
Count	All Grps	36	207	243

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

13a

	Negligence	daylight no	daylight yes	Row Totals
Count	No	10	26	36
Row Percent		27.78%	72.22%	
Count	Yes	42	164	206
Row Percent		20.39%	79.61%	
Count	All Grps	52	190	242

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

13b

	daylight	Negligence No	Negligence Yes	Row Totals
Count	no	10	42	52
Row Percent		19.23%	80.77%	
Count	yes	26	164	190
Row Percent		13.68%	86.32%	
Count	All Grps	36	206	242

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

13c

	Night-unlit	Negligence No	Negligence Yes	Row Totals
Count	No	33	180	213
Row Percent		15.49%	84.51%	
Count	Yes	3	26	29
Row Percent		10.34%	89.66%	
Count	All Grps	36	206	242

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

13d

	Unknown cause	daylight no	daylight yes	Row Totals
Count	No	47	174	221
Row Percent		21.27%	78.73%	
Count	Yes	5	16	21
Row Percent		23.81%	76.19%	
Count	All Grps	52	190	242

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Daw n/Dusk	Negligence No	Negligence Yes	Row Totals
Count	No	34	197	231
Row Percent		14.72%	85.28%	
Count	Yes	2	9	11
Row Percent		18.18%	81.82%	
Count	All Grps	36	206	242

13e

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Night-lit by streetlights	Negligence No	Negligence Yes	Row Totals
Count	No	32	200	232
Row Percent		13.79%	86.21%	
Count	Yes	4	6	10
Row Percent		40.00%	60.00%	
Count	All Grps	36	206	242

13f

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Negligence	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	20	16	36
Row Percent		55.56%	44.44%	
Count	Yes	79	126	205
Row Percent		38.54%	61.46%	
Count	All Grps	99	142	241

14a

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Car/Stationw	Negligence No	Negligence Yes	Row Totals
Count	No	20	79	99
Row Percent		20.20%	79.80%	
Count	Yes	16	126	142
Row Percent		11.27%	88.73%	
Count	All Grps	36	205	241

14b

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Light Delivery Vehicle	Negligence No	Negligence Yes	Row Totals
Count	No	26	157	183
Row Percent		14.21%	85.79%	
Count	Yes	10	48	58
Row Percent		17.24%	82.76%	
Count	All Grps	36	205	241

14c

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	GVM>3500kg	Negligence No	Negligence Yes	Row Totals
Count	No	32	193	225
Row Percent		14.22%	85.78%	
Count	Yes	4	12	16
Row Percent		25.00%	75.00%	
Count	All Grps	36	205	241

14d

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

15a

	Negligence	Male No	Male Yes	Row Totals
Count	No	0	2	2
Row Percent		0.00%	100.00%	
Count	Yes	34	123	157
Row Percent		21.66%	78.34%	
Count	All Grps	34	125	159

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

15b

	Male	Negligence No	Negligence Yes	Row Totals
Count	No	0	34	34
Row Percent		0.00%	100.00%	
Count	Yes	2	123	125
Row Percent		1.60%	98.40%	
Count	All Grps	2	157	159

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

15c

	Female	Negligence No	Negligence Yes	Row Totals
Count	No	2	123	125
Row Percent		1.60%	98.40%	
Count	Yes	0	34	34
Row Percent		0.00%	100.00%	
Count	All Grps	2	157	159

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

16a

	Age21-30	Negligence No	Negligence Yes	Row Totals
Count	No	0	105	105
Row Percent		0.00%	100.00%	
Count	Yes	1	40	41
Row Percent		2.44%	97.56%	
Count	All Grps	1	145	146

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

16b

	Age31-40	Negligence No	Negligence Yes	Row Totals
Count	No	1	108	109
Row Percent		0.92%	99.08%	
Count	Yes	0	37	37
Row Percent		0.00%	100.00%	
Count	All Grps	1	145	146

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

16c

	Age41-50	Negligence No	Negligence Yes	Row Totals
Count	No	1	119	120
Row Percent		0.83%	99.17%	
Count	Yes	0	26	26
Row Percent		0.00%	100.00%	
Count	All Grps	1	145	146

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

16d

	Age51-60	Negligence No	Negligence Yes	Row Totals
Count	No	1	125	126
Row Percent		0.79%	99.21%	
Count	Yes	0	20	20
Row Percent		0.00%	100.00%	
Count	All Grps	1	145	146

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

16e

	Age>60	Negligence No	Negligence Yes	Row Totals
Count	No	1	133	134
Row Percent		0.75%	99.25%	
Count	Yes	0	12	12
Row Percent		0.00%	100.00%	
Count	All Grps	1	145	146

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

17a

	Friday	Driver No	Driver Yes	Row Totals
Count	No	54	142	196
Row Percent		27.55%	72.45%	
Count	Yes	3	45	48
Row Percent		6.25%	93.75%	
Count	All Grps	57	187	244

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

17b

	Thursday	Driver No	Driver Yes	Row Totals
Count	No	48	153	201
Row Percent		23.88%	76.12%	
Count	Yes	9	34	43
Row Percent		20.93%	79.07%	
Count	All Grps	57	187	244

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

17c

	Saturday	Driver No	Driver Yes	Row Totals
Count	No	44	158	202
Row Percent		21.78%	78.22%	
Count	Yes	13	29	42
Row Percent		30.95%	69.05%	
Count	All Grps	57	187	244

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

17d

	Monday	Driver No	Driver Yes	Row Totals
Count	No	46	162	208
Row Percent		22.12%	77.88%	
Count	Yes	11	25	36
Row Percent		30.56%	69.44%	
Count	All Grps	57	187	244

17e

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Wednesday	Driver No	Driver Yes	Row Totals
Count	No	50	167	217
Row Percent		23.04%	76.96%	
Count	Yes	7	20	27
Row Percent		25.93%	74.07%	
Count	All Grps	57	187	244

17f

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sunday	Driver No	Driver Yes	Row Totals
Count	No	51	169	220
Row Percent		23.18%	76.82%	
Count	Yes	6	18	24
Row Percent		25.00%	75.00%	
Count	All Grps	57	187	244

17g

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Tuesday	Driver No	Driver Yes	Row Totals
Count	No	49	171	220
Row Percent		22.27%	77.73%	
Count	Yes	8	16	24
Row Percent		33.33%	66.67%	
Count	All Grps	57	187	244

18a
18

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour17	Driver No	Driver Yes	Row Totals
Count	No	49	162	211
Row Percent		23.22%	76.78%	
Count	Yes	8	24	32
Row Percent		25.00%	75.00%	
Count	All Grps	57	186	243

18b

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour13	Driver No	Driver Yes	Row Totals
Count	No	53	169	222
Row Percent		23.87%	76.13%	
Count	Yes	4	17	21
Row Percent		19.05%	80.95%	
Count	All Grps	57	186	243

18c

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour7	Driver No	Driver Yes	Row Totals
Count	No	53	171	224
Row Percent		23.66%	76.34%	
Count	Yes	4	15	19
Row Percent		21.05%	78.95%	
Count	All Grps	57	186	243

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour15	Driver No	Driver Yes	Row Totals
Count	No	55	170	225
Row Percent		24.44%	75.56%	
Count	Yes	2	16	18
Row Percent		11.11%	88.89%	
Count	All Grps	57	186	243

18d

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour12	Driver No	Driver Yes	Row Totals
Count	No	51	174	225
Row Percent		22.67%	77.33%	
Count	Yes	6	12	18
Row Percent		33.33%	66.67%	
Count	All Grps	57	186	243

18e

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour16	Driver No	Driver Yes	Row Totals
Count	No	52	174	226
Row Percent		23.01%	76.99%	
Count	Yes	5	12	17
Row Percent		29.41%	70.59%	
Count	All Grps	57	186	243

18f

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour8	Driver No	Driver Yes	Row Totals
Count	no	53	174	227
Row Percent		23.35%	76.65%	
Count	yes	4	12	16
Row Percent		25.00%	75.00%	
Count	All Grps	57	186	243

18g

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour14	Driver No	Driver Yes	Row Totals
Count	No	53	177	230
Row Percent		23.04%	76.96%	
Count	Yes	4	9	13
Row Percent		30.77%	69.23%	
Count	All Grps	57	186	243

18h

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	daylight	Driver No	Driver Yes	Row Totals
Count	no	13	39	52
Row Percent		25.00%	75.00%	
Count	yes	44	146	190
Row Percent		23.16%	76.84%	
Count	All Grps	57	185	242

19a

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Driver	daylight no	daylight yes	Row Totals
Count	No	13	44	57
Row Percent		22.81%	77.19%	
Count	Yes	39	146	185
Row Percent		21.08%	78.92%	
Count	All Grps	52	190	242

19b

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Night-unlit	Driver No	Driver Yes	Row Totals
Count	No	50	163	213
Row Percent		23.47%	76.53%	
Count	Yes	7	22	29
Row Percent		24.14%	75.86%	
Count	All Grps	57	185	242

19c

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Unknown PFault	daylight no	daylight yes	Row Totals
Count	No	47	172	219
Row Percent		21.46%	78.54%	
Count	Yes	5	18	23
Row Percent		21.74%	78.26%	
Count	All Grps	52	190	242

19d

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Other PFault	daylight no	daylight yes	Row Totals
Count	No	47	173	220
Row Percent		21.36%	78.64%	
Count	Yes	5	17	22
Row Percent		22.73%	77.27%	
Count	All Grps	52	190	242

19e

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Dawn/Dusk	Driver No	Driver Yes	Row Totals
Count	No	55	176	231
Row Percent		23.81%	76.19%	
Count	Yes	2	9	11
Row Percent		18.18%	81.82%	
Count	All Grps	57	185	242

19f

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Night-lit by streetlights	Driver No	Driver Yes	Row Totals
Count	No	54	178	232
Row Percent		23.28%	76.72%	
Count	Yes	3	7	10
Row Percent		30.00%	70.00%	
Count	All Grps	57	185	242

19g

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

20a

	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	30	26	56
Row Percent	53.57%	46.43%	
Count	69	116	185
Row Percent	37.30%	62.70%	
Count	99	142	241

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

20b

	Car/Stationw	Driver No	Driver Yes	Row Totals
Count	No	30	69	99
Row Percent		30.30%	69.70%	
Count	Yes	26	116	142
Row Percent		18.31%	81.69%	
Count	All Grps	56	185	241

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

20c

	Light Delivery Vehicle	Driver No	Driver Yes	Row Totals
Count	No	40	143	183
Row Percent		21.86%	78.14%	
Count	Yes	16	42	58
Row Percent		27.59%	72.41%	
Count	All Grps	56	185	241

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

20e

	GVM>3500kg	Driver No	Driver Yes	Row Totals
Count	No	51	174	225
Row Percent		22.67%	77.33%	
Count	Yes	5	11	16
Row Percent		31.25%	68.75%	
Count	All Grps	56	185	241

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

21a

	Driver	Male No	Male Yes	Row Totals
Count	No	0	2	2
Row Percent		0.00%	100.00%	
Count	Yes	34	123	157
Row Percent		21.66%	78.34%	
Count	All Grps	34	125	159

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

21b

	Male	Driver No	Driver Yes	Row Totals
Count	No	0	34	34
Row Percent		0.00%	100.00%	
Count	Yes	2	123	125
Row Percent		1.60%	98.40%	
Count	All Grps	2	157	159

21c

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Female	Driver No	Driver Yes	Row Totals
Count	No	2	123	125
Row Percent		1.60%	98.40%	
Count	Yes	0	34	34
Row Percent		0.00%	100.00%	
Count	All Grps	2	157	159

22a

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age21-30	Driver No	Driver Yes	Row Totals
Count	No	2	103	105
Row Percent		1.90%	98.10%	
Count	Yes	0	41	41
Row Percent		0.00%	100.00%	
Count	All Grps	2	144	146

22b

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age31-40	Driver No	Driver Yes	Row Totals
Count	No	2	107	109
Row Percent		1.83%	98.17%	
Count	Yes	0	37	37
Row Percent		0.00%	100.00%	
Count	All Grps	2	144	146

22c

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age41-50	Driver No	Driver Yes	Row Totals
Count	No	2	118	120
Row Percent		1.67%	98.33%	
Count	Yes	0	26	26
Row Percent		0.00%	100.00%	
Count	All Grps	2	144	146

22d

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age51-60	Driver No	Driver Yes	Row Totals
Count	No	1	125	126
Row Percent		0.79%	99.21%	
Count	Yes	1	19	20
Row Percent		5.00%	95.00%	
Count	All Grps	2	144	146

22e

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Age>60	Driver No	Driver Yes	Row Totals
Count	No	1	133	134
Row Percent		0.75%	99.25%	
Count	Yes	1	11	12
Row Percent		8.33%	91.67%	
Count	All Grps	2	144	146

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Friday	daylight no	daylight yes	Row Totals
Count	No	43	151	194
Row Percent		22.16%	77.84%	
Count	Yes	9	39	48
Row Percent		18.75%	81.25%	
Count	All Grps	52	190	242

24a

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Thursday	daylight no	daylight yes	Row Totals
Count	No	43	156	199
Row Percent		21.61%	78.39%	
Count	Yes	9	34	43
Row Percent		20.93%	79.07%	
Count	All Grps	52	190	242

24b

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Saturday	daylight no	daylight yes	Row Totals
Count	No	41	159	200
Row Percent		20.50%	79.50%	
Count	Yes	11	31	42
Row Percent		26.19%	73.81%	
Count	All Grps	52	190	242

24c

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Monday	daylight no	daylight yes	Row Totals
Count	No	43	163	206
Row Percent		20.87%	79.13%	
Count	Yes	9	27	36
Row Percent		25.00%	75.00%	
Count	All Grps	52	190	242

24d

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Wednesday	daylight no	daylight yes	Row Totals
Count	No	48	168	216
Row Percent		22.22%	77.78%	
Count	Yes	4	22	26
Row Percent		15.38%	84.62%	
Count	All Grps	52	190	242

24e

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Tuesday	daylight no	daylight yes	Row Totals
Count	No	49	169	218
Row Percent		22.48%	77.52%	
Count	Yes	3	21	24
Row Percent		12.50%	87.50%	
Count	All Grps	52	190	242

24f

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

24g

	Sunday	daylight no	daylight yes	Row Totals
Count	No	45	174	219
Row Percent		20.55%	79.45%	
Count	Yes	7	16	23
Row Percent		30.43%	69.57%	
Count	All Grps	52	190	242

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

24h

	Night-lit by streetlights	Friday No	Friday Yes	Row Totals
Count	No	189	43	232
Row Percent		81.47%	18.53%	
Count	Yes	5	5	10
Row Percent		50.00%	50.00%	
Count	All Grps	194	48	242

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

25a

	Friday	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	80	113	193
Row Percent		41.45%	58.55%	
Count	Yes	19	29	48
Row Percent		39.58%	60.42%	
Count	All Grps	99	142	241

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

25b

	Thursday	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	79	119	198
Row Percent		39.90%	60.10%	
Count	Yes	20	23	43
Row Percent		46.51%	53.49%	
Count	All Grps	99	142	241

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

25c

	Saturday	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	84	115	199
Row Percent		42.21%	57.79%	
Count	Yes	15	27	42
Row Percent		35.71%	64.29%	
Count	All Grps	99	142	241

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

25d

	Monday	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	86	119	205
Row Percent		41.95%	58.05%	
Count	Yes	13	23	36
Row Percent		36.11%	63.89%	
Count	All Grps	99	142	241

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Wednesday	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	86	128	214
Row Percent		40.19%	59.81%	
Count	Yes	13	14	27
Row Percent		48.15%	51.85%	
Count	All Grps	99	142	241

25e

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sunday	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	92	127	219
Row Percent		42.01%	57.99%	
Count	Yes	7	15	22
Row Percent		31.82%	68.18%	
Count	All Grps	99	142	241

25f

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Friday	Male No	Male Yes	Row Totals
Count	No	27	93	120
Row Percent		22.50%	77.50%	
Count	Yes	7	32	39
Row Percent		17.95%	82.05%	
Count	All Grps	34	125	159

26a

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Thursday	Male No	Male Yes	Row Totals
Count	No	27	103	130
Row Percent		20.77%	79.23%	
Count	Yes	7	22	29
Row Percent		24.14%	75.86%	
Count	All Grps	34	125	159

26b

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Sunday	Male No	Male Yes	Row Totals
Count	No	31	112	143
Row Percent		21.68%	78.32%	
Count	Yes	3	13	16
Row Percent		18.75%	81.25%	
Count	All Grps	34	125	159

26c

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	87	121	208
Row Percent	41.83%	58.17%	
Count	11	21	32
Row Percent	34.38%	65.63%	
Count	98	142	240

29a

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour13	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	90	129	219
Row Percent		41.10%	58.90%	
Count	Yes	8	13	21
Row Percent		38.10%	61.90%	
Count	All Grps	98	142	240

29b

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour7	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	91	130	221
Row Percent		41.18%	58.82%	
Count	Yes	7	12	19
Row Percent		36.84%	63.16%	
Count	All Grps	98	142	240

29c

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour12	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	91	131	222
Row Percent		40.99%	59.01%	
Count	Yes	7	11	18
Row Percent		38.89%	61.11%	
Count	All Grps	98	142	240

29d

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour15	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	90	132	222
Row Percent		40.54%	59.46%	
Count	Yes	8	10	18
Row Percent		44.44%	55.56%	
Count	All Grps	98	142	240

29e

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Light Delivery Vehicle No	Light Delivery Vehicle Yes	Row Totals
Count	175	49	224
Row Percent	78.13%	21.88%	
Count	8	8	16
Row Percent	50.00%	50.00%	
Count	183	57	240

29f

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour14	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	93	134	227
Row Percent		40.97%	59.03%	
Count	Yes	5	8	13
Row Percent		38.46%	61.54%	
Count	All Grps	98	142	240

29g

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

30a

	hour13	Male No	Male Yes	Row Totals
Count	No	32	111	143
Row Percent		22.38%	77.62%	
Count	Yes	2	13	15
Row Percent		13.33%	86.67%	
Count	All Grps	34	124	158

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

30b

	hour7	Male No	Male Yes	Row Totals
Count	No	31	113	144
Row Percent		21.53%	78.47%	
Count	Yes	3	11	14
Row Percent		21.43%	78.57%	
Count	All Grps	34	124	158

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

30c

	hour15	Male No	Male Yes	Row Totals
Count	No	30	114	144
Row Percent		20.83%	79.17%	
Count	Yes	4	10	14
Row Percent		28.57%	71.43%	
Count	All Grps	34	124	158

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

30d

	hour16	Male No	Male Yes	Row Totals
Count	No	31	115	146
Row Percent		21.23%	78.77%	
Count	Yes	3	9	12
Row Percent		25.00%	75.00%	
Count	All Grps	34	124	158

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

32a

	daylight	Male No	Male Yes	Row Totals
Count	no	4	27	31
Row Percent		12.90%	87.10%	
Count	yes	30	96	126
Row Percent		23.81%	76.19%	
Count	All Grps	34	123	157

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

32b

	Male	daylight no	daylight yes	Row Totals
Count	No	4	30	34
Row Percent		11.76%	88.24%	
Count	Yes	27	96	123
Row Percent		21.95%	78.05%	
Count	All Grps	31	126	157

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

32c

	Female	daylight no	daylight yes	Row Totals
Count	No	27	96	123
Row Percent		21.95%	78.05%	
Count	Yes	4	30	34
Row Percent		11.76%	88.24%	
Count	All Grps	31	126	157

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

32d

	Night-unlit	Male No	Male Yes	Row Totals
Count	No	33	106	139
Row Percent		23.74%	76.26%	
Count	Yes	1	17	18
Row Percent		5.56%	94.44%	
Count	All Grps	34	123	157

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

33a

	Age21-30	daylight no	daylight yes	Row Totals
Count	No	22	81	103
Row Percent		21.36%	78.64%	
Count	Yes	8	33	41
Row Percent		19.51%	80.49%	
Count	All Grps	30	114	144

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

33b

	Age31-40	daylight no	daylight yes	Row Totals
Count	No	20	87	107
Row Percent		18.69%	81.31%	
Count	Yes	10	27	37
Row Percent		27.03%	72.97%	
Count	All Grps	30	114	144

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

33c

	Age41-50	daylight no	daylight yes	Row Totals
Count	No	25	93	118
Row Percent		21.19%	78.81%	
Count	Yes	5	21	26
Row Percent		19.23%	80.77%	
Count	All Grps	30	114	144

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

33d

	Age51-60	daylight no	daylight yes	Row Totals
Count	No	25	100	125
Row Percent		20.00%	80.00%	
Count	Yes	5	14	19
Row Percent		26.32%	73.68%	
Count	All Grps	30	114	144

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

33e

	Age>60	daylight no	daylight yes	Row Totals
Count	No	30	103	133
Row Percent		22.56%	77.44%	
Count	Yes	0	11	11
Row Percent		0.00%	100.00%	
Count	All Grps	30	114	144

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

12

	hour11	Negligence No	Negligence Yes	Row Totals
Count	No	34	197	231
Row Percent		14.72%	85.28%	
Count	Yes	2	10	12
Row Percent		16.67%	83.33%	
Count	All Grps	36	207	243

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

12

	hour18	Negligence No	Negligence Yes	Row Totals
Count	No	35	196	231
Row Percent		15.15%	84.85%	
Count	Yes	1	11	12
Row Percent		8.33%	91.67%	
Count	All Grps	36	207	243

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

12

	hour9	Negligence No	Negligence Yes	Row Totals
Count	No	34	197	231
Row Percent		14.72%	85.28%	
Count	Yes	2	10	12
Row Percent		16.67%	83.33%	
Count	All Grps	36	207	243

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

12

	hour10	Negligence No	Negligence Yes	Row Totals
Count	No	35	196	231
Row Percent		15.15%	84.85%	
Count	Yes	1	11	12
Row Percent		8.33%	91.67%	
Count	All Grps	36	207	243

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

18

	hour10	Driver No	Driver Yes	Row Totals
Count	No	54	177	231
Row Percent		23.38%	76.62%	
Count	Yes	3	9	12
Row Percent		25.00%	75.00%	
Count	All Grps	57	186	243

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour11	Driver No	Driver Yes	Row Totals
Count	No	54	177	231
Row Percent		23.38%	76.62%	
Count	Yes	3	9	12
Row Percent		25.00%	75.00%	
Count	All Grps	57	186	243

18

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour18	Driver No	Driver Yes	Row Totals
Count	No	54	177	231
Row Percent		23.38%	76.62%	
Count	Yes	3	9	12
Row Percent		25.00%	75.00%	
Count	All Grps	57	186	243

18

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour9	Driver No	Driver Yes	Row Totals
Count	No	55	176	231
Row Percent		23.81%	76.19%	
Count	Yes	2	10	12
Row Percent		16.67%	83.33%	
Count	All Grps	57	186	243

18

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	Other PFault	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	90	130	220
Row Percent		40.91%	59.09%	
Count	Yes	9	12	21
Row Percent		42.86%	57.14%	
Count	All Grps	99	142	241

20

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour18	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	93	135	228
Row Percent		40.79%	59.21%	
Count	Yes	5	7	12
Row Percent		41.67%	58.33%	
Count	All Grps	98	142	240

29

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

	hour11	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	93	136	229
Row Percent		40.61%	59.39%	
Count	Yes	5	6	11
Row Percent		45.45%	54.55%	
Count	All Grps	98	142	240

29

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

29

	hour10	Car/Stationw No	Car/Stationw Yes	Row Totals
Count	No	92	136	228
Row Percent		40.35%	59.65%	
Count	Yes	6	6	12
Row Percent		50.00%	50.00%	
Count	All Grps	98	142	240

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

30

	hour9	Male No	Male Yes	Row Totals
Count	No	32	117	149
Row Percent		21.48%	78.52%	
Count	Yes	2	7	9
Row Percent		22.22%	77.78%	
Count	All Grps	34	124	158

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

30

	hour11	Male No	Male Yes	Row Totals
Count	No	32	118	150
Row Percent		21.33%	78.67%	
Count	Yes	2	6	8
Row Percent		25.00%	75.00%	
Count	All Grps	34	124	158

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

30

	hour18	Male No	Male Yes	Row Totals
Count	No	34	118	152
Row Percent		22.37%	77.63%	
Count	Yes	0	6	6
Row Percent		0.00%	100.00%	
Count	All Grps	34	124	158

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

30

	hour10	Male No	Male Yes	Row Totals
Count	No	32	118	150
Row Percent		21.33%	78.67%	
Count	Yes	2	6	8
Row Percent		25.00%	75.00%	
Count	All Grps	34	124	158

Summary Frequency Table (Spreadsheet3 in Veel botsings)
Marked cells have counts > 10
(Marginal summaries are not marked)

30

	hour10	Male No	Male Yes	Row Totals
Count	No	32	118	150
Row Percent		21.33%	78.67%	
Count	Yes	2	6	8
Row Percent		25.00%	75.00%	
Count	All Grps	34	124	158

Bylaag I - Voorbeeld AR&OAR-vorms

Accident Report (AR) Form

ENERAL INFORMATION

In terms of the National Road Traffic Act, Act No 93 of 1996, a driver must report her/his involvement in an accident ***in person*** within 24 hours of its occurrence to the nearest Metro, Municipal, Traffic Police (MMTP) office or South African Police Services (SAPS) station. This is only applicable if a police/traffic officer did not attend the accident due to the apparent minor nature thereof. However, the hours of operation of these offices must be taken into consideration. ***A driver must present her/his driving licence when the accident is reported***.

This form must be completed for all accidents which occur on a public road and where a vehicle was involved, i.e. all roads where the public or part of the public has right of access. This could include private property.

This form can/may be completed personally by a driver of a vehicle involved in an accident where no criminal case docket has been opened/registered (such as 'damage only' accidents), ***only*** if s/he is in a condition to do so. ***A police official, traffic officer or other authorised person must be prepared to help the driver complete the form***.

At the prescribed fee, a photocopy of this form may only be furnished in response to a written request from an involved party (i.e. driver, passenger, pedestrian, cyclist or owner of damaged property), ***if they can prove that they were the involved party****; and/or to a person who is not an involved party,* ***only if they have the written permission or authority of the involved party****. If a case docket has been opened/registered for a criminal investigation of an accident by the SAPS and the matter is still under investigation, any written request for a photocopy of a completed accident report form must be submitted to the Senior Public Prosecutor (SPP) of that particular magisterial district via the relevant SAPS station commissioner. S/he will determine whether a photocopy may be furnished or not.*

The name of the SAPS station in which area the accident occurred must be supplied on Page 1 of the form, even if the accident is reported and/or the form completed at/by an MMTP office/officer.

NB: *Every effort must be made to specify the exact* ***'LOCATION'*** *of the accident on Page 1 of the form. Always specify the* ***Province*** *and* ***Street*** *or* ***Road*** *(by name or number, e.g. N4) before proceeding to complete the appropriate section for accidents in town or on rural roads/freeways. Be sure to complete the box with* ***Speed Limit****,* ***Road Type*** *and* ***Junction Type*** *in* ***all cases****.*

STRUCTIONS FOR COMPLETION OF THE FORM

It is essential that the information recorded on this form is an ***accurate*** reflection of the circumstances of the accident.

When completing this form, please use ***BLOCK/CAPITAL LETTERS*** *only.*

Mark the relevant ***blocks*** with a cross (***X***), and ***not*** the picture/illustration. However, to identify a particular vehicle (e.g. on Page 2), write the **reference letter** allocated to each vehicle (**A**, **B**, **C**, etc.) in the relevant blocks. Refer to pedestrians and cyclists as **P**, **Q**, **R**, etc. and passengers as **1**, **2**, **3**, etc.

When correcting a mistake, the person completing the form must initial and date against the correction, without interfering with any of the white blocks. ***No correction fluid/tape may be used****.*

Pages 1 and 2 must be completed in all instances. If there were any passengers in any vehicle (even if they were not injured), their particulars must be entered on Page 3. The particulars of the person completing the form ***must*** be entered in the 'Completed By' section in the bottom right-hand corner of Page 4.

All four pages of this form must be completed if a driver or passenger was killed or injured in the accident, or pedestrians or cyclists were involved.

All four pages of this form must also be completed if a vehicle carrying dangerous goods or hazardous materials is involved in an accident.

Once a driver has reported an accident at an MMTP office or SAPS station, and this form has been completed, an entry must be made in the Occurrence Book (OB), Accident Register, etc. The driver must then be furnished with a reference number (OB or AR) as proof that the accident has been reported.

OPERATIONAL PROCEDURES FOR MMTP AND SAPS OFFICERS

15. This Accident Report (AR) form replaces the Officer'sAccident Report (OAR) form.

16. *An AR form must be completed for each driver/pedestrian reporting an accident at an MMTPoffice or SAPS station.*

17. Apedestrian may also report an accident within 24 hours of its occurrence to his/her nearest MMTP office or SAPS station. S/he r present proof of identification.

18. *A person wanting to report his/her involvement in an accident must not be referred unnecessarily from one department to another office to another, or from one SAPS station to another.*

19. The TrafficAccident Register Number (TARN) in the 'For official use only' section on Page 1 of the form must be supplied by the M office where the completed AR forms are kept.

20. *The Capturing Authority Number (CAN) in the 'For official use only' section on Page 1 of the form must be supplied, by the capturing authority, from the accident number generated by the computer system on which the form is captured.*

21. If there is not sufficient space on the form for further particulars of witnesses, passengers, casualties or the description of the acci etc., relevant sections of additional forms must be completed and attached to the original.

22. *If there are more than two parties (e.g. more than two vehicles) involved in the accident, additional forms must be completed. E form must be numbered in sequence on the spaces provided (at 'Form-of-') e.g., Form 1 of 2, or Form 2 of 2.*

23. When a person, who reports an accident, prefers to write the description, and/or draw an accident sketch, s/he should sign next t relevant item.

24. *A police/traffic officer who attends an accident must complete this form immediately. Thereafter, an entry in the Occurrence B (OB) or Accident Register must be made. This must be done before going off duty.* ***Accident victims must not be told to repo accident at an MMTP office or SAPS station unless they are mentally composed and their vehicle is in a driveable roadworthy condition.***

25. A police/traffic officer who attends an accident must ensure that the particulars of all passengers, pedestrians and cyclists (ev they are not injured) are recorded, since names cannot be added to a completed AR form once it has been processed.

26. *When this form is completed at an MMTP office, it must not be registered at the SAPS station (SAPS 176 Accident Register proc* ***unless*** *a case docket has to be opened/registered for the accident to be criminally investigated. (In this instance it must be presu that an MMTP officer attended the accident and conducted a crime scene investigation. S/he must open/register a case docket a SAPS station in which area the accident occurred before s/he goes off duty. For such a crime scene investigation function t performed by an MMTP officer, there must be a formalised written co-operation/protocol agreement between the SAPS and relevant MMTP).*

27. When this form is completed at an SAPS station, the SAPS 176 Accident Register process must be followed. If ***no*** case docket ha be opened/registered for a criminal investigation of an accident, the ***original completed form*** must be collected by the rele MMTP or other authorised person, under cover of the SAPS 506 Delivery Note, within the prescribed period. It is not necessary photocopy to be made and kept in the SAPS station monthly accident file.

28. *When a member of the SAPS attends an accident of a serious nature (where a criminal case docket has to be opened/registe s/he must conduct a crime scene investigation and open/register a case docket immediately after the accident has been attende before s/he goes off duty. This must be done at the SAPS station in whose area the accident occurred.*

29. 'Signatures' and 'Initials' of persons who complete and check the form, ***and the official date stamp***, must be entered in the rele spaces.

30. *When this form is completed for an accident in which a case docket is opened/registered, 2 photocopies of the completed form* be made. *Both copies must be certified as true copies of the original form. One copy must be filed in the "A" clip of the case do The second copy must be collected by the relevant MMTP or other authorised person under cover of the SAPS 506 Delivery N* ***The original completed form must be filed in the SAPS station monthly accident file.*** *The CAS/CR reference number mus entered on all documents (original and photocopies).*

31. If the form is completed at an SAPS station, but the accident occurred in another SAPS station area, an Occurrence Book number must be allocated. Aphotocopy must then be made, and certified as a true copy of the original form. The original compl form, together with a covering letter, must be posted by registered mail or transferred by police vehicle to the SAPS station in w area the accident occurred. For record purposes the photocopy must be filed in the accident file of the SAPS station where the was completed.

32. *If any of the injured persons dies within six (6) days of the accident, the particulars on Page 1 and 3 of the form must be char accordingly by the office at which the form was completed before the form is collected by the relevant MMTP officer or any o authorised person.*

33. ***All culpable homicide motor vehicle accidents*** (in which a person is killed), **must** be reported to the National Arrive Alive Accident Information Centre immediately after such an accident, or before the police/traffic officer goes off duty. Tel: 0800 005 (toll free) or (012) 309 3669. Fax 0800 111 301 (toll free) or (012) 309 3655. The 'Fatal Accident Report' form must be used fo purpose.

e station area where accident occurred

Form of

* COMPLETE IF APPLICABLE)

Accident Report (AR) Form

cial use only

Accident Register Number

ring Authority Number

Accident date (DD/MM/YYYY): / /

Day of week: Su M Tu W Th F Sa

Number of vehicles involved

Time of accident (24h) :

OCATION

Built-up area: Y N

ce 1. EC 2. FS 3. GP 4. KZN 5. MP 6. NW 7. NC 8. LM 9. WC

/road name/road number

At intersection with (Street/road name/road no.)

Or between (Street/road name/road no.)

and (Street/road name/road no.)

Suburb (if in City/Town)

City/Town name

At intersection with (Road number/ name)

Or approximately km measured in compass direction N S E W

from

(Describe fixed point eg. town, river, bridge, culvert, intersecting street or road, on/off ramp of interchange, name of building/house, pole number, etc.)

nformation on kilometre marker: Road no/section km ,

Between (City/town) And (Next city/town)

76. SPEED LIMIT ON ROAD: km/h

ROAD TYPE:

1. Freeway
2. On/off ramp
3. Dual carriageway
4. Single carriageway (two way)
5. One way
8. Other (Specify)

JUNCTION TYPE:

1. Cross roads
2. T-junction
3. Staggered junction
4. Y-junction
5. Circle
6. Level crossing
7. Not a junction
9. On ramp/ slipway
10. Off ramp/ slipway
8. Other (Specify)

reading: **X** co-ordinate **Y** co-ordinate

PARTICULARS OF DRIVER A OR	DRIVERS	PARTICULARS OF DRIVER B OR
/	ID type/ ID number	/
	Country of origin of ID	
	Surname	
s Age		Initials Age
	Residential/home address	
) H W	Telephone number	( ) H W
	Work/contact address	
) H W	Cellphone/other number	( ) H W
sian 2. Black 3. Coloured /hite 98. Other 00. Unknown ale 2. Female 0. Unknown	How would you describe the driver? Gender	1. Asian 2. Black 3. Coloured 4. White 98. Other 00. Unknown 1. Male 2. Female 0. Unknown
	Driving licence number	
A B C1 C EB EC Other (Specify)	Driving licence code	A1 A B C1 C EB EC1 EC Other (Specify)
/ /	Date of issue (DD/MM/YYYY)	/ /
illed 2. Serious 3. Slight 4. No injury	Severity of injury	1. Killed 2. Serious 3. Slight 4. No injury
	Ambulance service, driver, case reference number & hospital	
Yes 2. No 0. Unknown	Seatbelt fitted/helmet present	1. Yes 2. No 0. Unknown
Yes 2. No 0. Unknown	Seatbelt/helmet **definitely** used	1. Yes 2. No 0. Unknown
Yes 2. No	Liquor/drug use **suspected**	1. Yes 2. No
Yes 2. No	Liquor/drug use: **evidentiary tested**	1. Yes 2. No
No Yes (Write particulars on page 3)	Any passengers/pedestrians/cyclists?	No Yes (Write particulars on page 3)

DETAILS OF VEHICLE A OR	VEHICLES	DETAILS OF VEHICLE B OR
N S E W	Travel towards direction	N S E W
f front and back number- orrespond with licence d expiry date	Number plate number	Check if front and back number-plate correspond with licence disc and expiry date of disc
	Licence disc number	
	Colour	
	Make	
	Model (e.g. 280SE, ASTRA)	
&	*Trailer number plate number	&
Yes 2. No 0. Unknown	Carried passengers for reward? (e.g. bus or taxi)	1. Yes 2. No 0. Unknown
	Breakdown company, telephone number & driver name	

VEHICLE TYPE

Passenger vehicles: Write the vehicle reference letter (A, B, C, etc.) in the blocks. A B

01. Motor car or station wagon
02. Combi/minibus
03. Midibus
04. Bus
05. Bus-train

Goods vehicles: Write the vehicle reference letter (A, B, C, etc.) in the blocks. A B

06. Light delivery vehicle
07. Panel van
08. GVM>3500kg (greater than)
09. Truck: Articulated
10. Truck: Articulated multiple

Motor cycles: Write the vehicle reference letter (A, B, C, etc.) in the blocks. A B

11. 125cc and under
12. Above 125cc
13. Tri-cycle
14. Quadru-cycle

Other vehicles: Write the vehicle reference letter (A, B, C, etc.) in the blocks. A B

15. Bicycle
16. Mobile equipment: (driven)
17. Caravan/trailer
18. Tractor
19. Animal-drawn vehicle
98. Other (Specify) _____

WEATHER CONDITIONS AND VISIBILITY: (Mark ONE only)

1. Clear
2. Overcast
3. Rain
4. Mist/fog
5. Hail
6. Dust
7. Fire/smoke
8. Snow
9. Severe wind
0. Unknown

LIGHT CONDITION: (Mark ONE only)

1. Daylight
2. Night: lit by street lights
3. Night: unlit
4. Dawn/dusk
8. Other (Specify) _____

ROAD SURFACE: (Mark ONE only)

1. Dry
2. Wet
3. Wet in areas
4. Ice
5. Snow
6. Loose gravel or sand
7. Slippery
8. Other (Specify) _____
9. Water: standing or moving

ROAD SURFACE TYPE: (Mark ONE only)

1. Concrete
2. Tarmac
3. Gravel
4. Dirt
8. Other (Specify) _____

QUALITY OF ROAD SURFACE: (Mark ONE only)

1. Good
2. Bumpy
3. Pothole
4. Cracks
5. Corrugated
8. Other (Specify) _____

ROAD MARKING TYPE:

1. Barrier line
9. None
8. Other _____

ROAD MARKING CONDITIONS:

0. Unknown
1. Good
2. Not good (Specify) _____
7. N/A

OBSTRUCTIONS:

1. Accident site
2. Roadworks
3. Roadblock
8. Other (Specify) _____
9. None

TRAFFIC CONTROL TYPE: (Mark ONE only)

1. Robot
2. Stop sign
3. Yield sign
4. Officer
5. Officer+robot
6. Uncontrolled
7. Not at junction or crossing
8. All robots out of order
9. Some robots out of order (Specify) _____
10. Flashing robots (red/ yellow)
11. Boom
12. Pedestrian crossing

ROAD SIGNS CLEARLY VISIBLE:

1. Yes
2. No
7. N/A

CONDITION OF ROAD SIGNS:

1. Good
2. Not good
3. Damaged or missing
7. N/A (Specify) _____

DIRECTION OF ROAD: (Mark ONE only)

1. Straight
2. Curving
3. Sharp curve 90 degree bend

FLAT OR SLOPED: (Write vehicle reference letter (A, B, C, etc.) in the blocks.)

A B
1. Flat
2. Uphill
3. Downhill
4. Steep uphill
5. Steep downhill

POSITION OF VEHICLE BEFORE ACCIDENT:

Write the vehicle reference letter (A, B, C, etc.) in the blocks.

A B
1. Correct road lane
2. Wrong road lane
3. Wrong side of road
4. Road shoulder
5. On-road parking bay
6. Off-road parking bay

VEHICLE MANOEUVRE/ WHAT DRIVER WAS DOING:

Write the vehicle reference letter (A, B, C, etc.) in the blocks.

A B
01. Turning right
02. Turning left
03. U-turn
04. Enter traffic flow
05. Merging
06. Diverging
07. Overtaking: pass to right
08. Overtaking: pass to left
09. Travelling straight
10. Reversing
11. Sudden start
12. Sudden stop
13. Busy parking
15. Changing lane
16. Swerving
17. Slowing down
18. Avoiding object
19. Stationary (e.g. waiting in traffic)
20. Parked (e.g. in parking bay)
98. Other _____

VEHICLE DAMAGE: (Select only ONE of the options below for each vehicle.)

Write the vehicle reference letter (A, B, C, etc.) in the blocks.

A B
01. Right front
02. Right mid-front
03. Right mid-back
04. Back right
05. Back centre
06. Back left
07. Left mid-back
08. Left mid-front
09. Left front
10. Front centre
11. Bonnet
12. Roof
13. Boot
14. Multiple
15. Caught fire
16. Rolled
17. Damage undercarriage
18. Damage no detail
19. No damage
20. Windscreen/ windows

ACCIDENT TYPE:

1. Head/rear end
2. Head on
3. Sideswipe: opposite directions
4. Sideswipe: same direction
7. Turn right in face of oncoming traffic
8. Approach at angle - both travelling straight
9. Approach at angle - one or both turning
11. Single vehicle, overturned
12. Accident with pedestrian
13. Accident with animal (Specify) _____
14. Accident with train
15. Accident with fixed object (Specify) _____
98. Other or unknown accident (Specify) _____

ACCIDENT SKETCH:

Show Direction North with arrow. Show direction, position and reference number of each vehicle, pedestrian, alleged point of impact, tyre marks, fixed point(s), and other object(s) involved. Measurements are optional.

BRIEF DESCRIPTION OF THE ACCIDENT:

PA

SUMMARY: DEATH OR INJURY TO PERSONS INVOLVED (including driver)

1. Number of persons dead (killed):
2. Number of persons seriously injured:
3. Number of persons slightly injured:
4. Number of persons not injured:

PARTICULARS OF PASSENGERS WHO ARE NOT INJURED

urname and initials Passenger number in vehicle (A, B, etc)
D number / Telephone/Cellphone number ( ) H W

urname and initials Passenger number in vehicle (A, B, etc)
D number / Telephone/Cellphone number ( ) H W

urname and initials Passenger number in vehicle (A, B, etc)
D number / Telephone/Cellphone number ( ) H W

PARTICULARS OF PASSENGERS, PEDESTRIANS AND CYCLISTS

senger number / ehicle (A, B, etc) Pedestrian Cyclist

Passenger number / in vehicle (A, B, etc) Pedestrian Cyclist

/	ID type/ ID number	/
	Country of origin of ID	
	Surname	
als Age		Initials Age
	Home/contact address	
) H W	Telephone number	( ) H W
) H W	Cellphone/other number	( ) H W
Asian 2. Black 3. Coloured White 98. Other 00. Unknown	How would you describe the person?	1. Asian 2. Black 3. Coloured 4. White 98. Other 00. Unknown
Male 2. Female 0. Unknown	Gender	1. Male 2. Female 0. Unknown
Killed 2. Serious 3. Slight 4. No injury	Severity of injury	1. Killed 2. Serious 3. Slight 4. No injury
	Ambulance service, driver, case reference number & hospital	
Yes 2. No 0. Unknown	Seatbelt fitted/helmet present	1. Yes 2. No 0. Unknown
Yes 2. No 0. Unknown	Seatbelt/helmet **definitely** used	1. Yes 2. No 0. Unknown
Yes 2. No	Liquor/drug use **suspected**	1. Yes 2. No
Yes 2. No	*Liquor/drug use: **evidentiary tested**	1. Yes 2. No

senger number / ehicle (A, B, etc) Pedestrian Cyclist

Passenger number / in vehicle (A, B, etc) Pedestrian Cyclist

/	ID type/ ID number	/
	Country of origin of ID	
	Surname	
ls Age		Initials Age
	Home/contact address	
) H W	Telephone/contact number	( ) H W
) H W	Cellphone/other number	( ) H W
Asian 2. Black 3. Coloured White 98. Other 00. Unknown	How would you describe the person?	1. Asian 2. Black 3. Coloured 4. White 98. Other 00. Unknown
Male 2. Female 0. Unknown	Gender	1. Male 2. Female 0. Unknown
Killed 2. Serious 3. Slight 4. No injury	Severity of injury	1. Killed 2. Serious 3. Slight 4. No injury
	Ambulance service, driver, case reference number & hospital	
1. Yes 2. No 0. Unknown	Seatbelt fitted/helmet present	1. Yes 2. No 0. Unknown
1. Yes 2. No 0. Unknown	Seatbelt/helmet **definitely** used	1. Yes 2. No 0. Unknown
1. Yes 2. No	Liquor/drug use **suspected**	1. Yes 2. No
1. Yes 2. No	*Liquor/drug use: **evidentiary tested**	1. Yes 2. No

WITNESSES

A police/traffic officer/other authorised person must make an attempt to obtain witnesses to an accident. This is particularly important in respect of independent eyewitnesses.

Bystanders at a scene of an accident must not be chased away before a good attempt is made by an officer to find out whether anyone witnessed (saw) the accident, and/or can give valuable information about circumstances relating to the accident, and/or can assist with the identification of deceased or seriously injured persons involved in the accident.

In the event of a reliable witness (passenger or independent eyewitness) residing or working in another city/town, an affidavit must, as s as possible, be taken from him/her either at the scene or at the police station/traffic police department. (This is in the event of a CR/CAS police case docket being registered.)

Independent eyewitness ☐ Passenger of vehicle ☐		Independent eyewitness ☐ Passenger of vehicle ☐
	Surname & initials	
	Work/contact address	
Code		Code
( )	Cellphone number/ Telephone number	( )

PEDESTRIANS AND CYCLISTS ONLY: Person Reference ☐

Position
1. ☐ Roadway 2. ☐ Sidewalk /verge 3. ☐ Shoulder of road 4. ☐ Median

Location
1. ☐ Within marked crossing 2. ☐ Within 50m of crossing 3. ☐ Not at crossing

Manoeuvre
1. ☐ Facing traffic 2. ☐ Back to traffic 3. ☐ Crossing road

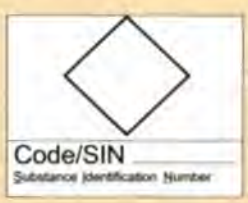
Pedestrian Action (for pedestrians only)
1. ☐ Walking 2. ☐ Running 3. ☐ Standing 4. ☐ Playing
5. ☐ Sitting 6. ☐ Lying down 7. ☐ Working 8. ☐ Other _____

Colour of clothing
1. ☐ Light 2. ☐ Dark 3. ☐ Light & Dark 4. ☐ Reflective
8. ☐ Other (Specify) _____

DANGEROUS GOODS ONLY: Vehicle Reference ☐

Dangerous goods carried in/on vehicle Y N
1. Dangerous goods carried ☐ ☐
2. Spillage occurred ☐ ☐
3. Vapour/gas emission occurred ☐ ☐

If dangerous goods were carried Y N
Dangerous goods placard displayed on vehicle: ☐ ☐



Draw placard and write the Code/SIN on the diagram

SPECIAL OBSERVATIONS: Vehicle reference ☐

Tyre appears to have burst 1. ☐ No 2. ☐ Yes 0. ☐ Unknown

Length of skidmarks: Tape measure _____ metres

Lights 1. ☐ Good 2. ☐ Faulty/not visible 0. ☐ Unknown (Comment) _____

Reflector quality or reflective tape) 1. ☐ Good 2. ☐ Faulty/not visible 0. ☐ Unknown (Comment) _____

Chevron quality 1. ☐ Good 2. ☐ Faulty/not visible 0. ☐ Unknown (Comment) _____

SPECIAL OBSERVATIONS: Person number ☐ in vehicle

Trapped/fallen out? 1. ☐ Trapped 2. ☐ Fallen out 7. ☐

Use of cellphone or other hand-held instrument suspected 1. ☐ Yes 2. ☐ No

Other relevant information (e.g. disabled person, etc) _____

SPECIAL OBSERVATIONS: Person number ☐ in vehicle

Trapped/fallen out? 1. ☐ Trapped 2. ☐ Fallen out 7. ☐

Use of cellphone or other hand-held instrument suspected 1. ☐ Yes 2. ☐ No

Other relevant information (e.g. disabled person, etc) _____

SPECIAL OBSERVATIONS: Vehicle reference ☐

Tyre appears to have burst 1. ☐ No 2. ☐ Yes 0. ☐ Unknown

Length of skidmarks: Tape measure _____ metres

Lights 1. ☐ Good 2. ☐ Faulty/not visible 0. ☐ Unknown (Comment) _____

Reflector quality or reflective tape) 1. ☐ Good 2. ☐ Faulty/not visible 0. ☐ Unknown (Comment) _____

Particulars of summons/written notice to **appear in court** issued by o

Particulars of notice to **discontinue use of vehicle** issued by offic

For official use only (applicable to office in which area the accident occurred)

Date Stamp

SAPS Occurrence Book no.

SAPS Accident Register no.

SAPS CAS no

Traffic Occurrence Book no.

Name of Met/Mun Pol/ Traffic Dept

CHECKED BY: Initials Rank

Signature

Surname

Service number

Capturing Authority Number (Copied from Page 1)

For official use only (office where accident was reported/ form is completed)

Name of Department (Met/Mun Pol/ Traffic/ SAPS)

Occurrence Book no.

COMPLETED BY: Driver, official, etc.

Initials Rank

Surname

Service number

Date / / Time :

Signature

81/148717 (Z 1435)
(1998/08/31)

1. Traffic Accident Register no.
(TARN of NaTIS)

☐☐☐☐☐☐☐☐☐☐☐☐

OAR

Form no.☐☐ of ☐☐ Total number of forms used.

2. Accident Register no.
(of local/provincial accident management system)

☐☐☐☐☐☐☐

Officer's Accident Report (OAR) Form

Instructions:
When completing this form please—
- use **BLOCK/CAPITAL LETTERS** only;
- place your **CROSS (X)** on BLOCKS provided and not on the description or illustration/picture.

1. This Officer's Accident Report (OAR) form replaced the SAP 352 Road Traffic Collision Report form.

2. It is essential that the information recorded on this OAR form is an accurate reflection of the circumstances of the accident.

3. An OAR form must be completed for each driver/pedestrian reporting an accident at a police station.

4. If there are more than two parties (that is more than two vehicles, or more than a vehicle and a pedestrian) involved in the accident, additional OAR forms must be completed.

5. If there is not enough space on the OAR form of particulars of additional witnesses, passenger casualties, or the description of the accident, etc. additional applicable sections of the forms must be completed and attached to the original form (stapled or pinned).

6. Each form must be numbered and start from 01, 02 etc. which must be entered in the top right-hand corner of page 1 (first two blocks). The second set of blocks is for the total number of OAR forms completed for a particular accident, for example, if two (2) OAR forms are completed, 02 must be entered in the second set of blocks on each OAR form (01 of 02 and 02 of 02, total number of forms used).

7. In the event of a dangerous goods spillage, a traffic officer must complete the required incident report as stipulated per SABS 0232 Part 3.

8. When a person in the employ of the SAPS completes this OAR form for an accident, it must be processed through the SAPS 176 register at a police station. **IF** a traffic officer/other authorized person completes the OAR form, it must only be processed through the SAPS 176 register at a police station **if** the accident warrants the registering of a police case docket. (In this instance, if must be presumed that such officer attended the accident and conducted the initial on-site investigation. He/She will therefore be expected to register a case docket. A docket must be registered immediately after the accident is attended.)

SUMMARY OF ACCIDENT DETAILS AND LOCALITY

3. TIME & DATE

1. Time of accident: ☐☐ : ☐☐ ☐ ☐ (HOUR : MIN AM PM)
2. Date of accident: ☐☐☐☐ ☐☐ ☐☐ (YEAR MM DD)
3. Day of the week: ☐☐☐☐☐☐☐ (Su Mo Tu We Th Fr Sa)

4. SUMMARY: DEATH / INJURY / PEDESTRIANS / VEHICLES INVOLVED:

1. Number of persons dead (killed): ☐☐☐
2. Number of persons seriously injured: ☐☐☐
3. Number of persons slightly injured: ☐☐☐
4. Number of pedestrians involved: ☐☐☐
5. Number of vehicles involved: ☐☐☐

5. RELEVANT TIMES

1. Time of arrival at accident scene: ☐☐:☐☐ ☐☐ ☐☐☐☐ ☐☐ ☐☐ (HOUR MIN AM PM YEAR MM DD)
2. Time of departure from accident scene: ☐☐:☐☐ ☐☐ ☐☐☐☐ ☐☐ ☐☐ (HOUR MIN AM PM YEAR MM DD)
3. This report was completed: ☐☐:☐☐ ☐☐ ☐☐☐☐ ☐☐ ☐☐ (HOUR MIN AM PM YEAR MM DD)
4. Reported by involved parties to reporting office (if applicable) ☐☐:☐☐ ☐☐ ☐☐☐☐ ☐☐ ☐☐ (HOUR MIN AM PM YEAR MM DD)

OTHER:

1 Name of police station: _____
or traffic policing department: _____
which initially / firstly dealt with this accident report:

2 Name of police station: _____
and traffic policing department: _____
in whose area the accident occurred:

3 Province: _____

6.4 CR/CAS Number: ☐☐☐☐ ☐☐ ☐☐ (MM YY)

6.5 SAPS Accident Register Number ☐☐☐☐ ☐☐ ☐☐ (MM YY)

6.6 SAPS Occurrence Book Number: ☐☐☐☐ ☐☐ ☐☐ (MM YY)

6.7 Traffic Occurrence Book Number ☐☐☐☐ ☐☐ ☐☐ (MM YY)

6.8 Accident Register Number ☐☐☐☐☐☐☐☐
(Of local/provincial accident management system)

6.9 GPS Number: ☐☐☐☐☐☐☐☐☐☐☐☐☐☐

EITHER complete 7 or 8

ACCIDENT IN A TOWN OR CITY
(An EXACT LOCATION is a must)

7.1 City/ town: _____
(name of the city or town)

7.2 Suburb: _____
(name of suburb)

7.3 Accident occurred on/in:

_____
(road/street name on which the vehicle travelled)

7.4 at intersection with/between:

_____
(road/street name which was approached)

and: _____
(road/street name if the accident occurred between 2 intersections)

7.5 at approximately _____ metres from/next to/

opposite street/house/pole number, and name of building:

_____

8. ACCIDENTS ON FREEWAYS OR RURAL ROADS
(An EXACT LOCATION is a must)

8.1 Accident occurred on (road name):

_____
(road name and/or road number, AND road section on which the vehicle travelled)

8.2 at intersection with: _____

_____
(road name and/or road number if accident occurred at an intersection)

8.3 or not at intersection but

☐☐ , ☐☐ km's (State the km distance from a fixed point)

8.4 measured in compass direction: ☐ ☐ ☐ ☐ (N S E W)

8.5 from fixed point/area:

_____
(describe the point - e.g. nearest kilometre or road marker beacon, bridge, river, intersection, police station, city, etc)

8.6 Between (city/town) _____

8.7 and (next city/town) _____

8.8 ☐
What you see on a kilometre or road marker beacon is what you write in here.

PARTICULARS OF DRIVER A or ☐

(Complete items 9 - 26 for driver)

9. Country of origin: _____

10. Identity number: ☐☐ - ☐☐☐☐☐☐☐☐☐☐☐

11. Surname & initials: _____

12. Residential/home/contact address: _____

_____ Postal Code: _____

13. Telephone code & number: (_____) _____

14. Business name and address/contact address: _____

_____ Postal Code: _____

15. Telephone code & number: (_____) _____

16. Population group: 01. Asian ☐ 03. Coloured ☐ 98. Other ☐
02. Black ☐ 04. White ☐ 00. Unknown ☐

17. Age: ☐☐☐ Unknown age ☐
If not certain please estimate:

18. Gender 01. Male ☐ 02. Female ☐ 00. Unknown ☐

19. Drivers licence and place of issue:
Licence code: ☐☐☐ PrDP: ☐☐☐
Date of issue: ☐☐☐☐ (YEAR) ☐☐ (MM) ☐☐ (DD)
Place of issue: _____

20. Severity of injury: 1. Killed ☐ 3. Slight ☐
2. Serious ☐ 4. No injury ☐

Seatbelt/helmet:

21.1 Seatbelt fitted/helmet present:
1. Yes ☐ 2. No ☐ 0. Unknown ☐

21.2 Seatbelt/helmet **definitely** used:
1. Yes ☐ 2. No ☐ 0. Unknown ☐

21.3 Seatbelt/helmet used **(according to hearsay)**
1. Yes ☐ 2. No ☐ 0. Unknown ☐

22. Trapped/fallen out?
1. Trapped ☐ 2. Fallen out ☐ 7. N/A ☐

Liquor/drug use:

23.1 Liquor/drug use **suspected:** 1. Yes ☐ 2. No ☐

23.2 Liquor/drug use: tested: 1. Yes ☐ 2. No ☐

24. Use of cell-phone or other handheld instrument suspected: 1. Yes ☐ 2. No ☐

25. Other relevant information/comments (e.g. disabled person, breathalyser reading, etc): _____

26. Ambulance service, driver, case reference number & hospital: _____

PARTICULARS OF DRIVER B or ☐ or PEDESTRIAN P or ☐ or CYCLIST ☐

(Complete items 9 - 26 for driver or cyclist, or 9 - 27 for pedestrian only)

9. Country of origin: _____

10. Identity number: ☐☐ - ☐☐☐☐☐☐☐☐☐☐☐

11. Surname & initials: _____

12. Residential/home/contact address: _____

_____ Postal Code: _____

13. Telephone code & number: (_____) _____

14. Business name and address/contact address: _____

_____ Postal Code: _____

15. Telephone code & number: (_____) _____

16. Population group: 01. Asian ☐ 03. Coloured ☐ 98. Other ☐
02. Black ☐ 04. White ☐ 00. Unknown ☐

17. Age: ☐☐☐ Unknown age ☐
If not certain please estimate:

18. Gender 01. Male ☐ 02. Female ☐ 00. Unknown ☐

19. Drivers licence and place of issue:
Licence code: ☐☐☐ PrDP: ☐☐☐
Date of issue: ☐☐☐☐ (YEAR) ☐☐ (MM) ☐☐ (DD)
Place of issue: _____

20. Severity of injury: 1. Killed ☐ 3. Slight ☐
2. Serious ☐ 4. No injury ☐

21. Seatbelt/helmet:

21.1 Seatbelt fitted/helmet present:
1. Yes ☐ 2. No ☐ 0. Unknown ☐

21.2 Seatbelt/helmet **definitely** used:
1. Yes ☐ 2. No ☐ 0. Unknown ☐

21.3 Seatbelt/helmet used **(according to hearsay)**
1. Yes ☐ 2. No ☐ 0. Unknown ☐

22. Trapped/fallen out?
1. Trapped ☐ 2. Fallen out ☐ 7. N/A ☐

23. Liquor/drug use:

23.1 Liquor/drug use **suspected:** 1. Yes ☐ 2. No ☐

23.2 Liquor/drug use: tested: 1. Yes ☐ 2. No ☐

24. Use of cell-phone or other handheld instrument suspected: 1. Yes ☐ 2. No ☐

25. Other relevant information/comments (e.g. disabled person, breathalyser reading, etc): _____

26. Ambulance service, driver, case reference number & hospital: _____

27. COMPLETE FOR PEDESTRIAN ONLY

27.1 Pedestrian position: 1. Roadway ☐ 2. Sidewalk/Verge ☐ 3. Shoulder of road ☐

27.2 Pedestrian location: 1. At crossing ☐ 2. Within 50m of crossing ☐ 3. Not at crossing ☐

27.3 Pedestrian manoeuvre: 1. Facing traffic ☐ 2. Back to traffic ☐ 3. Crossing road ☐

27.4 Pedestrian action: 1. Walking ☐ 2. Running ☐ 3. Standing ☐ 4. Playing ☐ 8. Other ☐ specify _____

27.5 Colour of clothing: 1. Light ☐ 2. Dark ☐ 3. Light & dark ☐ 4. Reflective ☐ 8. Other ☐ specify _____

VEHICLE DETAILS (A) or ☐

28. Registration number: ☐☐☐☐☐☐☐☐☐☐

(- Check that registration/licence plate number on Vehicle Licence Disc/Clearance Certificate (VLD/CC) corresponds with that on front and back of vehicle. Expiry date of VLD/CC should also be checked;
- Please complete items 29, 30 and 31 from details on VLD/CC)

29. Clearance Cert. No.: ☐☐☐☐☐☐☐☐☐☐☐☐

30. Register number: ☐☐☐☐☐☐

31. Vehicle identification number / Chassis number:

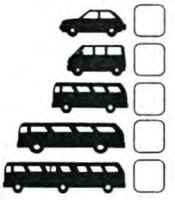
☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

32. Colour: Make: Model:

33. Vehicle type:

Passenger vehicles:

01. Motor car or station wagon: ☐
02. Combi/minibus: ☐
03. Midibus: ☐
04. Bus: ☐
05. Bus-train: ☐



Goods vehicles:

06. Light delivery vehicle: ☐
07. Panelvan: ☐
08. GVM>3500kg: (greater than) ☐
09. Truck: Articulated: ☐
10. Truck: Articulated multiple: ☐

Motor cycles:

11. 125cc and under: ☐
12. Above 125cc: ☐
13. Tri-cycle: ☐
14. Quadru-cycle: ☐

Other vehicles:

15. Bicycle: ☐
16. Mobile equipment: (driven) ☐
17. Caravan/trailer: ☐
18. Tractor: ☐
19. Animal drawn vehicle ☐
98. Other - vehicle not in 01 - 19 (describe) ☐

Usage of vehicle at time of accident (if applicable):

34. Dangerous Goods: 1. Yes ☐ 2. No ☐

35. Passengers for reward: 1. Yes ☐ 2. No ☐ 3. Taxi ☐

36. Vehicle manoeuvre/what driver was doing:

01. Turning Right: ☐ 05. Merging: ☐
02. Turning Left: ☐ 06. Diverging: ☐
03. U-Turn: ☐ 07. Overtaking: pass to right: ☐
04. Enter traffic flow: ☐ 08. Overtaking: pass to left: ☐

Additional options on next page:

VEHICLE DETAILS (B) or ☐

28. Registration number: ☐☐☐☐☐☐☐☐☐☐

29. Clearance Cert. No.: ☐☐☐☐☐☐☐☐☐☐☐☐

30. Register number: ☐☐☐☐☐☐

31. Vehicle identification number / Chassis number:

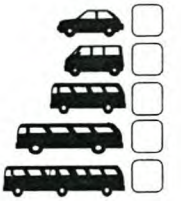
☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

32. Colour: Make: Model:

33. Vehicle type:

Passenger vehicles:

01. Motor car or station wagon: ☐
02. Combi/minibus: ☐
03. Midibus: ☐
04. Bus: ☐
05. Bus-train: ☐



Goods vehicles:

06. Light delivery vehicle: ☐
07. Panelvan: ☐
08. GVM>3500kg: (greater than) ☐
09. Truck: Articulated: ☐
10. Truck: Articulated multiple: ☐

Motor cycles:

11. 125cc and under: ☐
12. Above 125cc: ☐
13. Tri-cycle: ☐
14. Quadru-cycle: ☐

Other vehicles:

15. Bicycle: ☐
16. Mobile equipment: (driven) ☐
17. Caravan/trailer: ☐
18. Tractor: ☐
19. Animal drawn vehicle ☐
98. Other - vehicle not in 01 - 19 (describe) ☐

VEHICLE DETAILS A or ☐

Options continued from previous page:

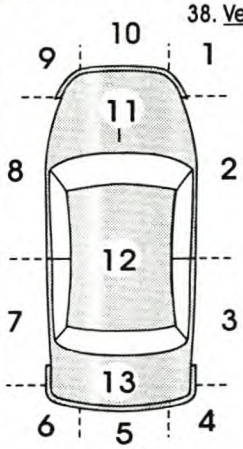
09. Travelling straight: ☐
10. Reversing: ☐
11. Sudden start: ☐
12. Sudden stop: ☐
13. Busy parking: off roadway: ☐
14. Busy parking: on roadway: ☐
15. Changing lane: ☐
16. Swerving: ☐
17. Slowing down: ☐
18. Avoiding object: ☐
19. Stationary: (eg. waiting in traffic) ☐
20. Parked: (eg. in parking bay) ☐
98. Other: Describe ☐

_____

Compass direction of travel: 1. North ☐ 2. South ☐ 3. East ☐ 4. West ☐ 0. Unknown ☐

Vehicle damage:

01. Right front: ☐
02. Right mid-front: ☐
03. Right mid-back ☐
04. Back right: ☐
05. Back centre: ☐
06. Back left: ☐
07. Left mid-back: ☐
08. Left mid-front: ☐
09. Left front: ☐
10. Front centre: ☐
11. Bonnet: ☐
12. Roof: ☐
13. Boot: ☐
14. Multiple: ☐
15. Caught fire: ☐
16. Rolled: ☐
17. Damage undercarriage: ☐
18. Damage no detail: ☐
19. No damage: ☐



Details of breakdown company used:
Name of breakdown company, telephone number, driver's name:

_____

Registration no. of breakdown vehicle: ☐☐☐☐☐☐☐☐☐☐

Tyre appears to have burst before accident:
1. No ☐ 2. Yes ☐ which tyre _____ 00. Unknown ☐

Length of skidmarks:
1. Tape measure ☐ _____ metres or
2. Heel-to-toe method ☐ _____

Lights: Working condition:
1. Good ☐ 2. Faulty/not visible ☐ _____ (Comment) 00. Unknown ☐

Reflector quality:
1. Good ☐ 2. Faulty/not visible ☐ _____ (Comment) 00. Unknown ☐

Chevron quality:
1. Good ☐ 2. Faulty/not visible ☐ _____ (Comment) 00. Unknown ☐

Dangerous goods carried in/on vehicle:
1. No: no goods ☐
2. Yes, but no spillage ☐
3. Yes, spillage occurred ☐
4. Yes: vapour/gas leaking/emission occurred ☐

Dangerous goods sign/placard on vehicle:
Please draw in

Code/SIN _____
(Substance Identification Number)

VEHICLE DETAILS B or ☐

Options continued from previous page:

09. Travelling straight: ☐
10. Reversing: ☐
11. Sudden start: ☐
12. Sudden stop: ☐
13. Busy parking: off roadway: ☐
14. Busy parking: on roadway: ☐
15. Changing lane: ☐
16. Swerving: ☐
17. Slowing down: ☐
18. Avoiding object: ☐
19. Stationary: (eg. waiting in traffic) ☐
20. Parked: (eg. in parking bay) ☐
98. Other: Describe ☐

_____

37. Compass direction of travel: 1. North ☐ 2. South ☐ 3. East ☐ 4. West ☐ 0. Unknown ☐

38. Vehicle damage:

01. Right front: ☐
02. Right mid-front: ☐
03. Right mid-back ☐
04. Back right: ☐
05. Back centre: ☐
06. Back left: ☐
07. Left mid-back: ☐
08. Left mid-front: ☐
09. Left front: ☐
10. Front centre: ☐
11. Bonnet: ☐
12. Roof: ☐
13. Boot: ☐
14. Multiple: ☐
15. Caught fire: ☐
16. Rolled: ☐
17. Damage undercarriage: ☐
18. Damage no detail: ☐
19. No damage: ☐

39. Details of breakdown company used:
Name of breakdown company, telephone number, driver's name:

_____

40. Registration no. of breakdown vehicle: ☐☐☐☐☐☐☐☐☐☐

41. Tyre appears to have burst before accident:
1. No ☐ 2. Yes ☐ which tyre _____ 00. Unknown ☐

42. Length of skidmarks:
1. Tape measure ☐ _____ metres or
2. Heel-to-toe method ☐ _____

43. Lights: Working condition:
1. Good ☐ 2. Faulty/not visible ☐ _____ (Comment) 00. Unknown ☐

44. Reflector quality:
1. Good ☐ 2. Faulty/not visible ☐ _____ (Comment) 00. Unknown ☐

45. Chevron quality:
1. Good ☐ 2. Faulty/not visible ☐ _____ (Comment) 00. Unknown ☐

46. Dangerous goods carried in/on vehicle:
1. No: no goods ☐
2. Yes, but no spillage ☐
3. Yes, spillage occurred ☐
4. Yes: vapour/gas leaking/emission occurred ☐

47. Dangerous goods sign/placard on vehicle:
Please draw in

Code/SIN _____
(Substance Identification Number)

ENGER ☐ Number
EHICLE: ☐ Which vehicle

PARTICULARS OF PASSENGERS - KILLED or INJURED

PASSENGER ☐ Number
OF VEHICLE: ☐ Which vehicle

Country of origin: _____

dentity number: ☐☐ - ☐☐☐☐☐☐☐☐☐☐☐☐☐

urname & initials: _____

esidential/home/contact address: _____

_____ Postal Code: _____

elephone code & number: (_____) _____

usiness telephone code & number: (_____) _____

opulation group: 01. Asian ☐ 03. Coloured ☐ 98. Other ☐
02. Black ☐ 04. White ☐ 00. Un-known ☐

ge: ☐☐☐ Unknown age ☐
If not certain please estimate:

Gender: 01. Male ☐ 02. Female ☐ 00. Unknown ☐

everity of injury: 1. Killed ☐ 2. Serious ☐ 3. Slight ☐

assenger location: 1. Front seat ☐ 3. Back of goods vehicle ☐
2. Back seat ☐ 8. Other ☐
Specify _____

rapped/fallen out?
1. Trapped ☐ 2. Fallen out ☐ 7. N/A ☐

eatbelt/helmet:

0.1 Seatbelt fitted/helmet present:
1. Yes ☐ 2. No ☐ 0. Unknown ☐

0.2 Seatbelt/helmet definitely used:
1. Yes ☐ 2. No ☐ 0. Unknown ☐

0.3 Seatbelt/helmet used (according to hearsay)
1. Yes ☐ 2. No ☐ 0. Unknown ☐

mbulance service, driver, case reference number & hospital:

_____

48. Country of origin: _____

49. Identity number: ☐☐ - ☐☐☐☐☐☐☐☐☐☐☐☐☐

50. Surname & initials: _____

51. Residential/home/contact address: _____

_____ Postal Code: _____

52. Telephone code & number: (_____) _____

53. Business telephone code & number: (_____) _____

54. Population group: 01. Asian ☐ 03. Coloured ☐ 98. Other ☐
02. Black ☐ 04. White ☐ 00. Un-known ☐

55. Age: ☐☐☐ Unknown age ☐
If not certain please estimate:

56. Gender: 01. Male ☐ 02. Female ☐ 00. Unknown ☐

57. Severity of injury: 1. Killed ☐ 2. Serious ☐ 3. Slight ☐

58. Passenger location: 1. Front seat ☐ 3. Back of goods vehicle ☐
2. Back seat ☐ 8. Other ☐
Specify _____

59. Trapped/fallen out?
1. Trapped ☐ 2. Fallen out ☐ 7. N/A ☐

60. Seatbelt/helmet:

60.1 Seatbelt fitted/helmet present:
1. Yes ☐ 2. No ☐ 0. Unknown ☐

60.2 Seatbelt/helmet definitely used:
1. Yes ☐ 2. No ☐ 0. Unknown ☐

60.3 Seatbelt/helmet used (according to hearsay)
1. Yes ☐ 2. No ☐ 0. Unknown ☐

61. Ambulance service, driver, case reference number & hospital:

_____

(10)

SENGER ☐ Number
VEHICLE: ☐ Which vehicle

PARTICULARS OF PASSENGERS - KILLED or INJURED

PASSENGER ☐ Number
OF VEHICLE: ☐ Which vehicle

Country of origin: _____

Identity number: ☐☐ - ☐☐☐☐☐☐☐☐☐☐☐☐☐

Surname & initials: _____

Residential/home/contact address: _____

_____ Postal Code: _____

Telephone code & number: (_____) _____

Business telephone code & number: (_____) _____

Population group: 01. Asian ☐ 03. Coloured ☐ 98. Other ☐
02. Black ☐ 04. White ☐ 00. Un-known ☐

Age: ☐☐☐ Unknown age ☐
If not certain please estimate:

Gender: 01. Male ☐ 02. Female ☐ 00. Unknown ☐

Severity of injury: 1. Killed ☐ 2. Serious ☐ 3. Slight ☐

Passenger location: 1. Front seat ☐ 3. Back of goods vehicle ☐
2. Back seat ☐ 8. Other ☐
Specify _____

Trapped/fallen out?
1. Trapped ☐ 2. Fallen out ☐ 7. N/A ☐

Seatbelt/helmet:

60.1 Seatbelt fitted/helmet present:
1. Yes ☐ 2. No ☐ 0. Unknown ☐

60.2 Seatbelt/helmet definitely used:
1. Yes ☐ 2. No ☐ 0. Unknown ☐

60.3 Seatbelt/helmet used (according to hearsay)
1. Yes ☐ 2. No ☐ 0. Unknown ☐

Ambulance service, driver, case reference number & hospital:

_____

48. Country of origin: _____

49. Identity number: ☐☐ - ☐☐☐☐☐☐☐☐☐☐☐☐☐

50. Surname & initials: _____

51. Residential/home/contact address: _____

_____ Postal Code: _____

52. Telephone code & number: (_____) _____

53. Business telephone code & number: (_____) _____

54. Population group: 01. Asian ☐ 03. Coloured ☐ 98. Other ☐
02. Black ☐ 04. White ☐ 00. Un-known ☐

55. Age: ☐☐☐ Unknown age ☐
If not certain please estimate:

56. Gender: 01. Male ☐ 02. Female ☐ 00. Unknown ☐

57. Severity of injury: 1. Killed ☐ 2. Serious ☐ 3. Slight ☐

58. Passenger location: 1. Front seat ☐ 3. Back of goods vehicle ☐
2. Back seat ☐ 8. Other ☐
Specify _____

59. Trapped/fallen out?
1. Trapped ☐ 2. Fallen out ☐ 7. N/A ☐

60. Seatbelt/helmet:

60.1 Seatbelt fitted/helmet present:
1. Yes ☐ 2. No ☐ 0. Unknown ☐

60.2 Seatbelt/helmet definitely used:
1. Yes ☐ 2. No ☐ 0. Unknown ☐

60.3 Seatbelt/helmet used (according to hearsay)
1. Yes ☐ 2. No ☐ 0. Unknown ☐

61. Ambulance service, driver, case reference number & hospital:

_____

(11)

ENVIRONMENT, THE ROAD, AND ACCIDENT TYPE

2. Weather conditions and visibility:

1. Clear ☐ 4. Mist / fog ☐ 7. Fire / smoke ☐
2. Overcast ☐ 5. Hail ☐ 8. Snow ☐
3. Rain ☐ 6. Dust ☐ 0. Unknown ☐

3. Light condition:

1. Daylight ☐ 3.Night: unlit ☐ 8. Other ☐
Specify
2.Night: lit by street lights ☐ 4.Dawn/dusk ☐ _____

4. Road surface:

1. Dry ☐ 4.Ice ☐ 7.Slippery ☐
2.Wet ☐ 5. Snow ☐ 8. Other ☐
Specify
3.Wet in areas ☐ 6. Loose gravel or sand ☐ _____

5. Road surface type:

1.Concrete ☐ 3.Gravel ☐ 8. Other ☐
Specify
2.Tarmac ☐ 4.Dirt ☐ _____

6. Quality of road surface:

1.Good ☐ 4.Cracks ☐ 8. Other ☐
Specify
2.Bumpy ☐ 5.Corrugated ☐ _____
3.Pothole ☐

7. Road separation:

1. With median/island ☐ 2.No median/island ☐

74. Conditions of road signs:

1. Good ☐ 2. Not good ☐ 3. Damaged or missing ☐

Specify _____

75. Road marking conditions:

1. Good ☐ 2. Not good ☐

Specify _____

76. Speed limit on road: ☐☐☐ km/h

77. Road type:

1.Freeway ☐ 4. Single carriageway ☐
2.On/off ramp ☐ 5.One way ☐
3. Dual carriageway ☐ 8. Other ☐
Specify

78. Junction type:

1. Cross roads ☐ 5. Circle ☐
2. T - junction ☐ 6. Level crossing ☐
3. Staggered junction ☐ 7. Not at junction ☐
4. Y - junction ☐ 8. Other ☐
Specify

8. Traffic flow:

1. Two way ☐ 2.One way ☐

9. Direction of road:

1.Straight ☐ 2. Curving ☐

10. Flat or sloped?

1. Flat ☐ 2. Sloped (Up/down) ☐

11. Obstructions:

1. Accident site ☐ 3.Roadblock ☐ 9. None ☐
2.Roadworks ☐ 8. Other ☐

Specify _____

12. Control type:

1.Robot ☐ 5.Officer+robot ☐
2.Stop sign ☐ 6.Uncontrolled ☐
3.Yield sign ☐ 7. Not at junction or crossing ☐
4.Officer ☐ 8.All robots out of order ☐
9.Some robots out of order ☐
Specify:

_____

Road signs:

Clearly visible ☐ 2. Not clearly visible ☐
(which?) _____

79. Accident type:

1. Head/rear end: ☐
2. Head on: ☐
3. Sideswipe: opposite directions: ☐
4. Sideswipe: same direction: ☐
5. Turn left from wrong lane: ☐
6. Turn right from wrong lane: ☐
7. Turn right in face of oncoming traffic: ☐
8. Approach at angle - both travelling straight: ☐
9. Approach at angle - one or both turning: ☐
10. Reversing: ☐
11. Single vehicle, overturned: ☐
12. Accident with pedestrian: ☐
13. Accident with animal ☐
13.1 Domestic animal ☐
13.2 Wild animal ☐
13.3 Other animal ☐
Specify animal:

_____

Name and address of owner:

_____

_____

_____

14. Accident with train: ☐
15. Accident with fixed object: ☐
Specify:

_____

98. Other or unknown accident type: ☐
Specify:

_____

_____

ROUGH SKETCH OF ACCIDENT

Accident sketch:

Show direction, position and reference number of each vehicle, pedestrian, alleged point(s) of impact, tyre marks, fixed point(s), and other object(s) involved.

Show direction North with arrow

ere is not enough space for your rough sketch, key to rough ch and measurements, please draw and compile this on separate piece of paper.

OFFICER'S ON-SITE ACCOUNT OF ACCIDENT AND / OR OTHER RELEVANT DETAILS

81. Officer's account:

OPTIONAL DESCRIPTION OF ACCIDENT ACCORDING TO DRIVER(S) / PEDESTRIAN(S)

. As alleged by driver: [A] or [ ] or Pedestrian: [ ] or Cyclist: [ ]

As alleged by driver: [B] or [ ] or Pedestrian: [ ] or Cyclist: [ ]

PARTICULARS OF OFFICER / OFFICIAL WHO COMPLETED AND/OR CHECKED THIS FORM

84. Completed by:

Signature:

Rank:

Force/Persal/Service/ Infrastructure number:

Surname & initials:

Stationed at:

Checked by:

Signature:

Rank:

Force/Persal/Service/ Infrastructure number:

Surname & initials:

Stationed at:

85. Finalization instructions:

Date Stamp

Signature:

Rank:

Force/Persal/Service/ Infrastructure number:

Surname and initials:

WITNESSES

A police/traffic officer/other authorized person must make an attempt to obtain witnesses to an accident. This is especially so in respect of independent eye-witnesses.

Bystanders at a scene of an accident must not be chased away before a good attempt is made by an officer to find out whether anyone witnessed (saw) the accident, and/or anyone can give valuable information about circumstances relating to the accident, and/or anyone can assist with the identification of deceased or seriously injured persons involved in the accident.

In the event of a reliable witness (passenger or independent eye-witness) residing or working in another city/town, an affidavit must, as soon as possible, be taken from him/her either at the scene or at the police station/traffic police department (This is in the event of a CR/CAS police case docket being registered).

This form provides for the details of 2 witnesses. Each witness must be identified as an independent eye-witness (IEW) or as a passenger of one of the involved vehicles (PW) by placing a cross (x) on the appropriate block. If he/she is a passenger, indicate the appropriate vehicle reference number.

WITNESS 01:

IEW (Independent Eye-witness): ☐

PW (Passenger of Involved Vehicle): ☐

86. Surname & initials: _____

87. Residential/home/contact address: _____

_____ Postal Code: _____

88. Telephone code & number: (_____) _____

89. Business / contact address: _____

_____ Postal Code: _____

90. Telephone code & number: (_____) _____

91. Brief description of accident as alleged by witness:

_____

_____

_____

_____

WITNESS 02:

IEW (Independent Eye-witness): ☐

PW (Passenger of Involved Vehicle): ☐

86. Surname & initials: _____

87. Residential/home/contact address: _____

_____ Postal Code: _____

88. Telephone code & number: (_____) _____

89. Business / contact address: _____

_____ Postal Code: _____

90. Telephone code & number: (_____) _____

91. Brief description of accident as alleged by witness:

_____

_____

_____

_____